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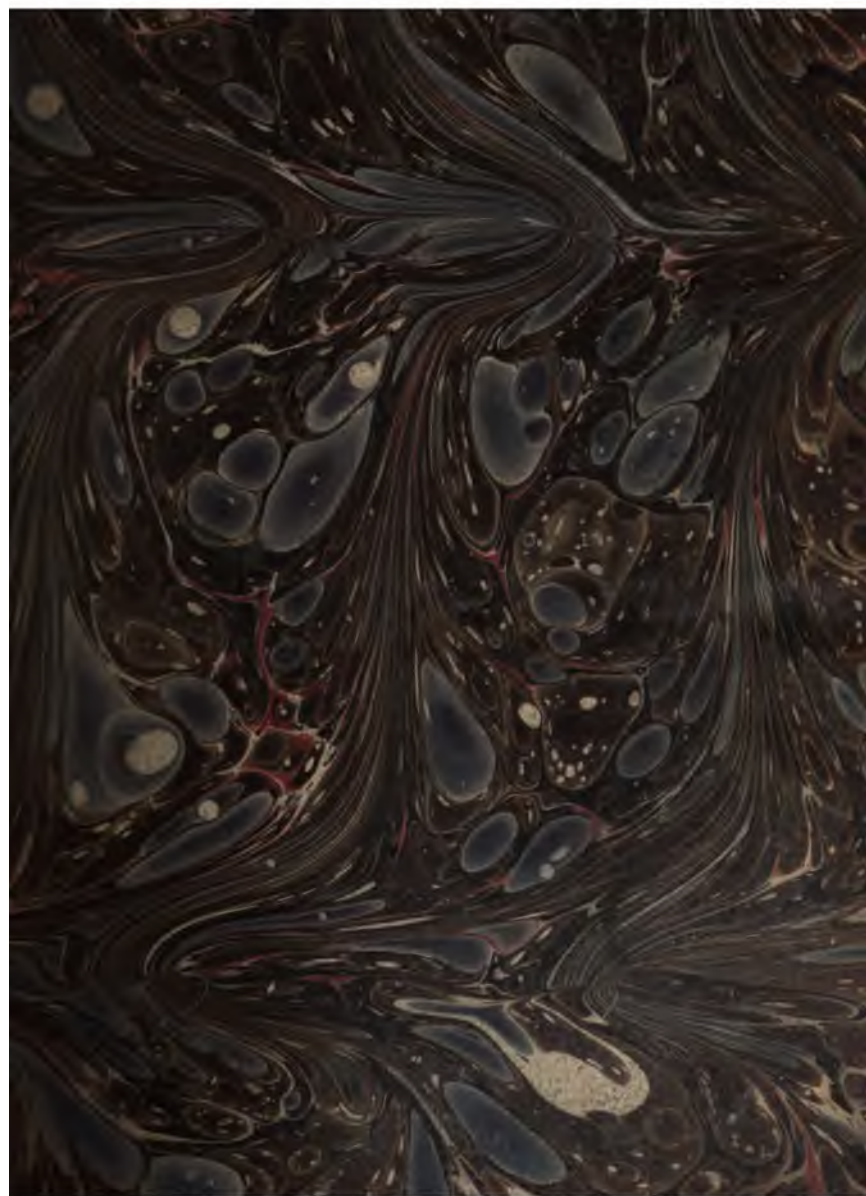
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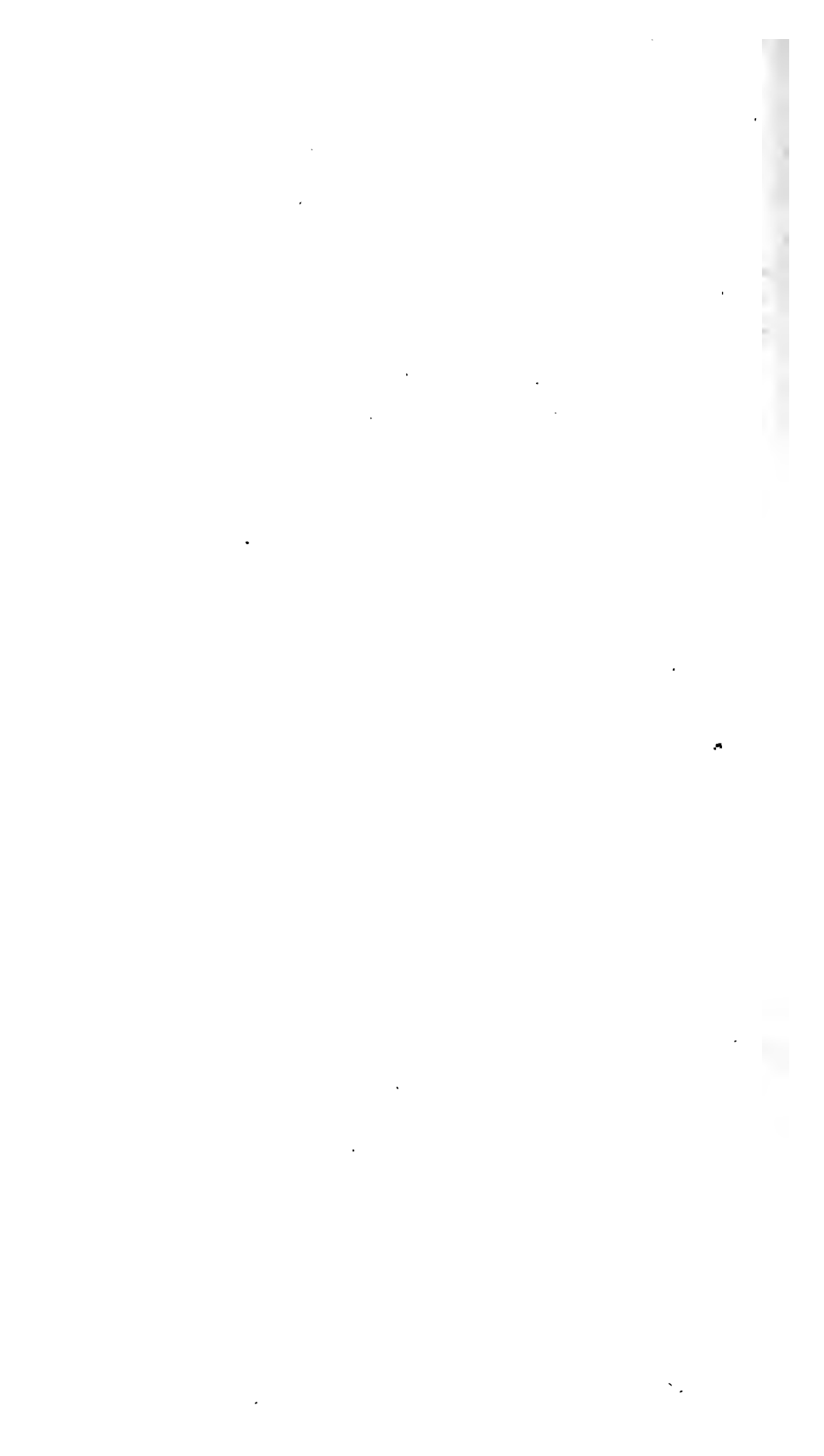
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1830 -







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THE

LIFE AND REMAINS

OF

EDWARD DANIEL CLARKE;

PROFESSOR OF MINERALOGY

IN THE UNIVERSITY OF CAMBRIDGE.

BY THE

REV. WILLIAM OTTER, A.M. F.L.S.

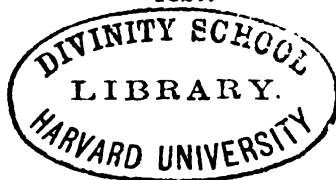
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1827.



PREFACE TO THE FIRST EDITION.

IN submitting these Memoirs of Dr. Clarke to the Subscribers and to the public, the Individual who has undertaken to compile them, fears that he must bespeak their indulgence for the very imperfect manner in which the task, interrupted by various causes, and resumed under many disadvantages, has been performed.

It has been his main object to bring forward most prominently into the Work so much of the Remains of Dr. Clarke as seemed likely to gratify his friends. At the same time he has made it his endeavour to select from the large mass of materials before him, those portions, which appeared best calculated to illustrate his life and character, or by their intrinsic merit to support his established reputation with the public. In what manner the Editor has executed this task of selection, rendered more difficult by the irregular manner in which the materials have been supplied, must be left to the judgment of others. He hopes he will be thought to have done no injustice to the memory of his friend, whom he has endeavoured to exhibit as he was, fully, candidly, and fairly ; and if it shall be judged in any quarter, that he has indulged too much in the language of panegyric, he is persuaded that those who were best acquainted with Dr. Clarke will be most ready to make every allowance for the error. It is difficult for any one whom he regarded to speak of him with moderation, and the Author of this Memoir shared too long and to largely in his friendship, to be exempt from the partiality it inspired.

He has to acknowledge much kindness in the prosecution of his task. To one friend, in particular, his thanks are justly due for more assistance than he can well express ; suffice it to say, without involving him in the imperfections or even in the opinions of the narrative, that his aiding or correcting hand may be traced in every portion of the work, and that in some of them the pains he has bestowed have been not less than those of the author himself. To many other persons the work is indebted for the ready supply of letters, and of such other information as they happened to possess.

WILLIAM OTTER.

PREFACE TO THE SECOND EDITION.

THE second Edition of the Life and Remains of Dr. Clarke, is now offered to the public with little alteration, and therefore requires but little comment from the Author. He cannot, however, suffer this occasion to pass by without expressing to the Subscribers, the strong sense he entertains of the kindness with which the work has been received by them—a kindness the more valuable, as it conveys to him the welcome assurance that the memory of his Friend has not suffered in his hands.

It remains only to take a short notice of the present Edition.—A few verbal errors have been corrected; some letters which had been mislaid while the first Edition was printing, and have been since found, are now inserted; and at the suggestion of several Friends of Dr. Clarke, his Tract upon the Blow-pipe and his Letter to Arch-deacon Wrangham upon the character of Wheler have been re-printed for the Appendix.

WILLIAM OTTER.

Stockwell, December 31st, 1824.

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THE LIFE
OF
EDWARD DANIEL CLARKE.

CHAPTER I.

Ancestors of Dr. E. D. Clarke—William Wotton—Mild William Clarke—Rev. Edward Clarke—Birth of Dr. E. D. Clarke—His early education—Death of his Father.

EDWARD DANIEL CLARKE, the subject of these Memoirs, was born June 5, 1769, at Willingdon, in the county of Sussex, and was descended from a line of ancestors, whose learning and abilities reflected, for a long series of years, the highest credit upon the literature of their country. The celebrated Dr. William Wotton, justly considered in his time as a prodigy of early knowledge, was his great-grandfather. His grandfather, known to his friends by the appellation of *mild* William Clarke, was one of the most accomplished scholars of his age; and his father, Mr. Edward Clarke, although labouring for the best part of his life under the disadvantages of an infirm constitution, was distinguished in the same honourable career. Nor were these instances solitary, occurring one only in each descent: for so widely diffused has been the love of literature throughout the different members of this family, that, of four entire generations, beginning with Dr. Wotton and his wife Anne Hammond, of St. Alban's, in Kent, and ending with Dr. Clarke, his brothers and his sister, there is scarcely a single individual, whether male or female, who, at one period or other, and in proportion to the opportunities offered, has not been remarkable for literary genius or taste; while many of them, by their learning and their works, have arrived at high degrees of eminence and reputation.

The character and writings of Dr. Wotton are so well known to the literary world, that a short notice of them here will be thought sufficient. Besides several larger works, he was the author of many tracts and dissertations, involving much classical and antiquarian research. One of the earliest of these was entitled, "Reflections upon Ancient and Modern Learning;" which, being afterward published in a second edition, in 1697, with a dissertation of Dr. Bentley's annexed, was the means of involving him incidentally in the celebrated controversy between that great scholar and Mr. Boyle. From a dispute like this, in which abuse was lavished on every side with an unsparing hand,

it was little to be expected, that Dr. Wotton would escape without some unpleasant marks of his having been connected with it; still less when it is considered, that his immediate adversary was the caustic dean of St. Patrick's: but it is honourable to him to record the testimony of Mr. Boyle himself, to a species of merit displayed by him, which must have been somewhat rare in that controversy, that his remarks were urged with decency and modesty, and that there was a vein of learning running through his work without any ostentation of it. In the latter part of his life, having retired into Wales, in consequence of some pecuniary embarrassment, he determined to profit by the occasion to make himself master of the Welsh language; and among the fruits of this industry, are a Welsh sermon, which he preached and printed, being, as it is said, the first that was ever composed and delivered by an Englishman; two Histories of Cathedrals; and, finally, a digest of the laws of Hoel Dha, which he did not live to finish. He died at Buxted, in Sussex, in 1726, at the age of sixty-one, and was buried there by the side of his wife, who had departed a few years before him. His profound and extensive knowledge, which is allowed by all, was the natural consequence of studious habits, combined with a wonderful memory, which is said to have retained correctly every thing that he had ever read. To the latter faculty may be chiefly attributed the singular facility he possessed of acquiring languages; and so extraordinary are the testimonies which have been handed down to us of the precocity of his intellect in this respect,* when a child, that if they did not rest upon the most unquestionable authorities, or if they had been recorded in a manner less specific and minute, they would scarcely have found credit with posterity.

* The following among many other testimonies, of the early proficiency of William Wotton, are taken from a MS. of his father's and are inserted in Nichols's Literary Anecdotes of the eighteenth century, vol. iv. p. 253—5.

"Mr. Ombler, a fellow of Corpus Christi college, coming occasionally near my house, and hearing of my child, was pleased, to satisfy himself, to do me the honour to make an experiment of the truth of what he had heard; and, as a testimony of his satisfaction, after he had examined my son, he gave this account of him:

"*Prima juventutis indoles futurum virtutis fructum indicat.*

"*Hanc sententiam posuit JOHANNES OMBLER, Coll. Corporis Christi Cantab. socius, Gulielmi Wottoni gratiâ, qui quinque plus minus natus annos, linguam Latinam, Græcam, et Hebræicam, mirum in modum callet.*

"*Maii 24, 1672.*

"Sir Thomas Brown, Doctor of Physic, a gentleman not only famous for his practice, but illustrious as well in Philology, as Philosophy, upon the observation he had of my son, left this testimony of him with me:

"I do hereby declare and certify, that I heard William Wotton, son to Mr. Henry Wotton of Wrentham, of the age of six years, read a stanza in Spenser very distinctly and pronounce it properly: as also some verses in the first Eclogue of Virgil, which I purposely chose out; and also construed the same truly. Also some verses in Homer, and the *Carmina Aurea* of Pythagoras, which he read well and construed; as he did also the first verse of the 4th chapter of Genesis, in Hebrew, which I purposely chose out.

THOMAS BROWN.

"*July 20, 1672.*"

Of mild William Clarke, whose name and relationship seem to connect him more closely with these Memoirs, it will be permitted to speak more fully; especially since his eminence as a scholar, which his singular modesty contributed in some respect to veil, and the many interesting and excellent qualities of his heart, present him to our notice in an attractive point of view. He was born at Haghmon Abbey, in Shropshire, in 1696, being the son of a substantial and respectable yeoman, who occupied a considerable tract of land under the Kynastons of Hardwick in that county, and acted also as a confidential agent to the family. The Abbey, with its dependances, has since passed by marriage to the Corbets of Sundorne; and they now form together an interesting and remarkable ruin, within the boundaries of Sundorne Park. He received his early education where many other distinguished scholars have laid the foundation of theirs, at Shrewsbury School, under Mr. Lloyd, and in 1713 was removed from thence to St. John's College, Cambridge. Of this society he was at the early age of twenty years elected fellow, Jan. 22. 1716-17, together with nine others in consequence of the ejection* of several of the seniors, for refusing the abjuration oath, on the accession of George I. His character and learning recommended him, at an early period, to the notice of many distinguished men. He was successively domestic chap-

“Galielmo Wotton puerulo septenni, Latine, Græcè, et Hebraicè, valdè *supra* statem erudito, similem, id est, felicissimum in timore Dei, in gratiâ celesti, et in reuerentibus studiis profectum, summis votis, et certissimâ spe exoptat,

“Jun. 12, 1673.

ED. NORVIC.” [Bp. REYNOLDS.]

* At this time, ten fellows were thus displaced, and the true account of their ejection is this:—The statutes of St. John's College require the fellows, as soon as they are of a sufficient standing, to take the degree of B.D. But the oath of allegiance is required to be taken with every degree: so that at the Revolution, twenty-four of the fellows not coming into the oath of allegiance, and the statutes requiring them to commence B.D., they were constrained to part with their fellowships. As to those who had taken their degrees before the Revolution, there was nothing to cause their ejection, till their refusal of the abjuration oath, enacted on the accession of George I.—See Nichols's Anecdotes, vol. iv. p. 247.

Mr. Baker, who died in 1740, was probably the survivor of all these. These principles of the members of this society made it little agreeable at court; however they had always one good friend (though he by no means agreed with their, in sentiments,) Commissary Dr. Rowland Hill, paymaster to the army in Flanders, King William. See Wotton's Baronetage, vol. 5, p. 215. One day, he had reports from Cambridge, the then Lord Carteret said, “Well, Mr. C, what have you to say for your college now?”—“Why, to be sure, I circumstances are against us; but though I hardly shall, who am an old man, yet I dare say your Lordship will live to see that College as obsequious as a man, yet I dare prediction was completely fulfilled; when his Lordship nobly who was the last that retained in secret the principles of this party.—Nichols's Anecdotes, vol. iv. p. 249. It is probable, that Dr. Taylor's fierce or unaccommodating, as it is related in his Life, that he quarrelled with his patron and friend, Mr. Owen, of Conover, because he pressed him to drink the Pretender's health upon his knees, a practice common enough at that time in Shropshire.

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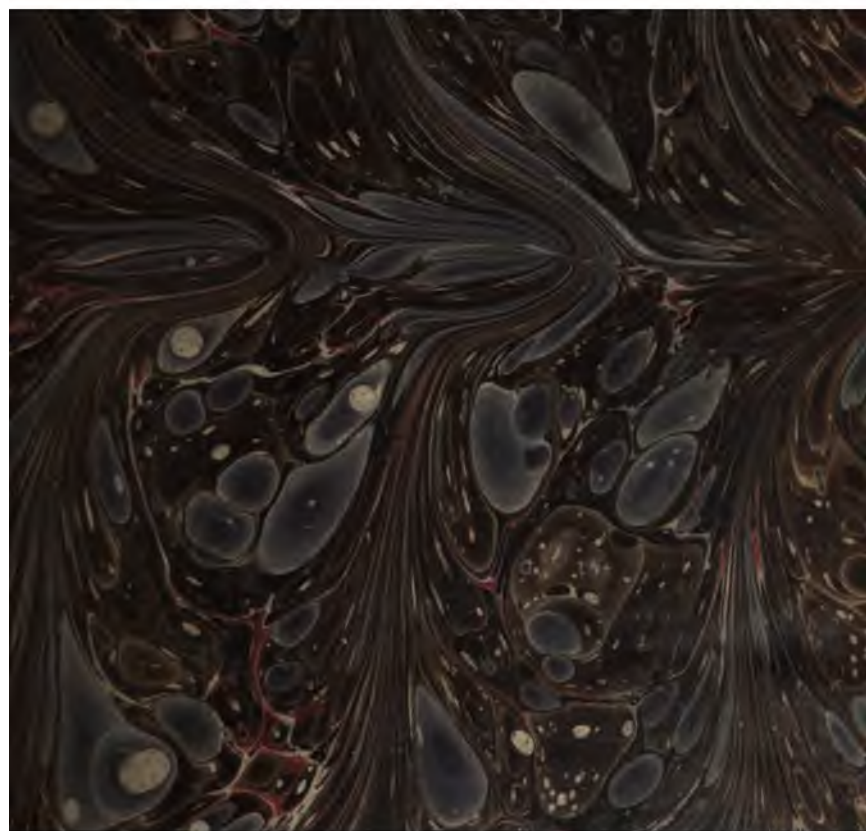
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which have been published in Mr. Nichols's *Anecdotes*, as well as others which are in private hands, bear the most ample testi-

‘——— Nec tela timeres
Gallica, nec Pictum tremeres, nec littore toto
Prospiceres dubiis venturum Saxona ventis.’

My wife does not forget her good wishes and compliments upon this occasion. How would you surprise all your friends in Fleet-street, to tell them that you were just come from France, with a vivacity that every body would believe to be just imported from thence !”

“Brighthelmstone, August . . 1736.

“We are now about taking our leave of that very variable element the sea. After it had smiled upon us for a month, it is at present so black and angry, that there is no seeing or approaching it. It is all either fog or foam; and I truly pity every body who cannot fly from it. We had this morning some hopes of entertaining your Society with our discoveries upon the beach. The sea had thrown up a piece of an old coin, grown green with salt water: but, instead of an Otho's head, it proved only a fragment of Charles I.; and I humbly nodded over it, as one of the friends of *The Mitre*.^{*} Pray let me know which way your researches ran at present in that Society. We have here a very curious old font,† covered over with hieroglyphics, representing the two Sacraments, which rise in very bold but bad relievos on each side of it.”

His cursory observations upon Warburton's *Divine Legislation*, on its first appearance, will by many be thought interesting:—

“Mr. Warburton's book‡ is but just arrived in this country; and, I believe, had scarce found its way so soon, if it had not been for the uncommon zeal of a young Preacher at our Visitation: he took it into his head to censure the performance, and was much too angry—placing him with Sextus Empiricus and Spinoza among the ancients. Who would have thought of such gentlemen meeting together, unless it was in the Mysteries?—We suffer equally by the extremes of too much or too little zeal; having so many nice critics to observe the conduct of clergy writers, that are equally offended with a Dutch phlegm or a Spanish fire. For my part, I wonder what has given so much offence in this book: or why it is they are so angry with a writer who, in all appearance, means no harm. It is true he is fond of new tracts, and, like a brisk adventurer, strikes out for fresh discoveries. Where is the hurt of this? Some things may succeed well; and if he fails, the loss is his own venture. Though I do not approve of many passages, as to his arguments, conclusions, critique, expression, references, &c. yet I see nothing worth being angry or alarmed at, and am often pleased with things new to me, and arguments well managed. I do not understand what they mean by a moral sense; but, as others do, it may be of use. And, surely, the First Book may pass without censure; and I agree with you, that there are many things well done in it. The next Book is a little more enterprising, which I have not yet gone through.—But here I find myself often obliged to him. Why we had that long story of the Mysteries I know not; but the puppet-show in Virgil is very pretty, and he has made the whole allusion very consistent: though, by the same rule that Virgil's sixth book is a representation of the Mysteries, Homer's eleventh *Odyssey* should be so likewise; and then you would have ancient and modern Mysteries, and between both might discover many great improvements in ancient Legislation. He is, indeed, too much inclined to favour the wisdom of the ancient Legislators: with him the magistrates are all sages, and the people dupes.

“As to critique, it generally gives way to hypothesis: his scheme is the point in view, not the correctness of his authorities; otherwise his *Princeps*, his *Hierophanta*, &c. the *Preface to Zelenus' Laws*, the *tyxpartia* in his *Sermon*, had never passed off so readily. Whoever can suppose that preface *Zelenus's*, may suppose Mr. Pope's preface to *Homer Caxton's*. And his quoting Jerom for a *she-mystagogue*, when the passage says *eternâ debilitate castus*, is as surprising, p. 193, k. This was well corrected in the *Grub-street*. And where does *tyxpartia* signify keeping a due temper in disputes, or searches after knowledge?

* The Tavern, where the Society of Antiquaries then held their regular meetings

† Engraved in “*The Antiquarian Repertory*,” vol. III. pp. 56. and 225, old edition.

‡ “*The Divine Legislation*.”—Nichols's *Anecdotes*, vol. I. p. 120

mony, not only to his erudition and good taste, but also to the high estimation in which he was held by the best and most learned of his contemporaries. The first publication in which he was engaged seems to have been recommended to him rather by a sense of filial piety, than by his own opinion of his fitness for the task, or by the desire of literary fame. It was the learned work of his father-in-law, Dr. Wotton, upon the laws of Hoel Dha, and was printed in 1730. To this he wrote the Latin Preface, and otherwise prepared it for the press: but so lightly did he esteem his own labour upon this book, that in allusion to some favourable public notice which Mr. Bowyer had taken of the Preface, he says, "The less you say of it the better, for I have no ambition to be, or to be thought, an author." In the spirit of this declaration, he seems to have generally acted in the course of his subsequent life; for, although he was the author of several learned Tracts upon various subjects, which excited considerable attention at the time, yet some of them were published without any name annexed, and others were incorporated with the works of his friends. He took a copy of the famous Chichester Inscription, which is now in the Duke of Richmond's garden, and caused it to be engraved for the collection of Welsh Laws. He was also the author of several of the Notes to the English Version

"The little prejudice of raising the Egyptian Antiquities above the Jewish has been the foible of several great men; nor is that any excuse for idle prepossession; Moses stands upon a level, at least, with any ancient writer; is as good an authority for ancient customs; and may justly claim a precedence, when the dispute lies between him and authors many centuries after him; which makes it something mysterious why the writing upon two tables of stone might not pass for an original, without supposing it an Egyptian custom, as he does, p. 196. And, to make his mysteries agree with the order observed by Virgil, he is a little inclined to new model his morality; making suicides, and those who give a loose to exorbitant passions, rather miserable than wicked, p. 206: and yet making the Fathers guilty of depraving and vitiating the Christian Religion, for adopting the terms and phrases (for I think he has carried his proofs no farther) of the mysteries. These terms, when in use, were in themselves innocent, and would perhaps more naturally affect the superstitious Heathens. But is there any great hurt in this? Might he not as well charge our Liturgy, as borrowing from Baal, "O Baal, hear us," *mutatis mutandis*? I will allow that there was too much indulgence among the ancient Christians in this particular; but, as many of the Fathers had been formerly friends to the Mysteries, I cannot wonder at some indulgence, much less think it so extremely criminal. But, after all, I have as much inclination to indulge Mr. Warburton as they had the old phraseology, and can imagine the design of both to be very excusable. It is plain Mr. Warburton is no enemy to paradoxes: his very scheme is a proof of it; a medium to prove the Divine Legation of Moses never thought of before. I take the plain case to be this:—The legislation of Moses all along supposes a future state; it is taken for granted. There was, perhaps, in his opinion, no occasion to insist on it particularly. The very burying of Joseph would, among Heathens, have been thought proof enough of it; but our Saviour's answer to the Sadducees puts it past doubt. Upon this supposition, therefore, the proof of a Divine Legation is brought to a nearer issue, by his miracles, by his promises of temporal rewards and punishments; which no Legislator but a person sent by divine authority would have ventured to have promised in the manner he has done."—Nichols's Anecdotes, vol. iv. p. 450—3.



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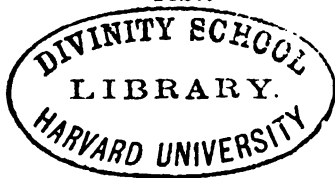
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1827.



priated to this purpose. He obtained the donation of many valuable volumes from different persons ; and, by his constant and liberal attention to this favourite object, raised an inconsiderable and neglected collection of books, into a very useful and respectable public library.

"As to his talents as a divine, he might, I think, be rather esteemed as an impressive and doctrinal, than as a highly eloquent preacher. In the more important points of his professional character, he was entitled to much higher praise. In strict attention to all the duties of a Christian pastor, in the most active and unwearied charity, he might be regarded as a model to the ministers of our church. Though his income was never large, it was his custom to devote a shilling in every guinea that he received, to the service of the poor. As a master, as a husband, and as a father, his conduct was amiable and endearing ; and, to close this imperfect sketch of him, with his most striking feature, he was a man of unaffected piety, and evangelical singleness of heart.

"Having thus given a slight yet a faithful account of Mr. Clarke, let me now speak of the admirable woman who was the dear companion of his life, and the affectionate rival of his virtues. Mrs. Clarke inherited, from her father Wotton, the retentive memory by which she was distinguished ; and she possessed the qualities in which Swift considered him as remarkably deficient, penetration and wit. She seemed, indeed, in these points, rather related to the laughter-loving Dean of St. Patrick's, than to his solemn antagonist. The moral excellence of her character was by no means inferior to the sprightly activity of her mind. Nature and education never formed, I believe, a more singular and engaging compound of good-humoured vivacity and rational devotion. Her whole life seemed to be directed by the maxim, which one of our English bishops adopted for his motto, 'Serve God, and be cheerful.' There was a degree of irascible quickness in her temper, but it was such as gave rather an agreeable than a dangerous spirit to her general manners. Her anger was never of long continuance, and usually evaporated in a comic *bon-mot*, or in a pious reflection. She was perfectly acquainted with the works of our most celebrated divines, and so familiar with the English muses, that, even in the decline of her life, when her recollection was impaired by age and infirmities, she would frequently quote, and with great happiness of application, all our eminent poets. She particularly delighted in the wit of Butler ; and wrote herself a short poem, which I am unable to recover, in the manner of Hudibras.

"Her sufferings on the death of her excellent husband were

extreme ; and though she survived him several years, it was in a broken and painful state of health. Through the course of a long life, and in the severe maladies that preceded her dissolution, she displayed all the virtues of a Christian with uniform perseverance, but without ostentation.

"Such were these amiable persons. I have endeavoured to give a very simple description of two characters, who being themselves most steadily attached to simplicity and truth, would have been wounded by the varnish of less faithful and more elaborate praise : yet, as they were both fond of verse, I am tempted to add a little tribute of affectionate respect to their memory, in the following epitaph :

"Mild William Clarke, and Anne his wife,
Whom happy love had join'd in life,
United in an humble tomb,
Await the everlasting doom.
And blest the dead ! prepar'd as these,
To meet their Saviour's just decrees !

On earth their hearts were known to feel
Such charity, and Christian zeal,
That should the world for ages last,
In adverse fortune's bitter blast,
Few friends so warm will man find here,
And God no servants more sincere."

Nichols's Anecdotes, vol. iv. p. 372.

It can be scarcely necessary to apologize to the reader for thus introducing to his notice the characters of two persons, who, besides their near connexion with Dr. Clarke, and the reverence and affection with which he always spoke of them, were so truly excellent and amiable in themselves, and have been so happily described by the author whom we have quoted. But we acknowledge a farther object in thus dwelling upon the qualities of this gifted pair. To those who were well acquainted with the subject of the present memoirs, and who still bear his image impressed in lively colours upon their remembrance, the picture will be productive of additional interest from the resemblance they cannot fail to trace between some of the most pleasing parts of these portraits, and several of the features which were most prominent in the mind of Dr. Clarke ; and if they, who knew him not, would fancy to themselves, the learning, the benevolence, and the communicativeness of mild William Clarke, happily blended with the memory, the vivacity, and the quickness of Anne Wotton, and the whole brightened with a glowing enthusiasm which was peculiarly his own, they might then form to themselves some notion of that singular assemblage of qualities which gave the charm to the conversation of Dr. Clarke ; a charm which we

may venture to affirm, those who knew him well will never forget, and the like of which they can scarcely hope ever to meet again. Mr. Clarke retired to Chichester in 1768, after having resigned the living of Buxted, which he had held for forty-four years, to his son. He died in 1771.

The tribute to his memory which is subjoined* was composed by his son, and placed in Buxted church; but the inscription

* "Memorie Sacrum
WILHELMUS CLARKE, A. M.
Cancellarii et Canonici Ecclesie Cicestrensis :
Quem pietate, literis, moribus urbanis,
humanitate et modestiâ ornatum
concives et familiares sui
uno ore ubique confessi sunt ;
et si ipsi siluissent,
testarentur ipsius scripta :
In communi vitâ comis, letus, utilis,
facile omnes perferre ac pati promptus,
ingenui pudoris, magni et liberalis animi :
In ecclesiâ suadens, facundus concionator,
ut non solum in aures fidelium,
sed etiam in animos
veridica stillaret oratio,
precibus offerendis fervidus et profuens,
ut, tanquam sanctior flamma,
in celos ascendere viderentur :
In parochiâ pastor vigil, laborum plenus,
indoctis magister, ægris solamen,
abjectis spes, pauperibus oramina :
tamen eleemosynas suas adeo occulte,
adeo latè disseminavit,
ut illas non nisi dies ultima judicii ultimi
revelare potuerit.
Natus est anno 1686 in comitatu Salopiensi
et cœnobio de Haghmon :
Primis literis imbutus in Salopiæ scholâ ;
collegii S'ti Johannis, Cantabrigiæ, socius :
Primo Adamo Ottley, Menevensi Episcopo,
postea Duci Novo-Castrensi, Thomæ Holles,
à sacris domesticis :
Tandem ad rectoriam de Buxted inter Regnos
à Wilhelmo Wake, Archiepiscopo Cantuariensi,
propter sua et egregia soceri sui
Wilhelmi Wottoni merita,
sine ambitu collatus.
Obiit Cicestris, Oct. 21, A. D. 1771."
"Sepulchrale marmor, quo subjacet Cicestris,
virente adhuc viridi senectâ,
mente solidâ et serenâ, sic inscripsit :"

The *sic inscripsit* refers to the following short inscription :

"Depositum GULIELMI CLARKE, A. M.
Canonici et Cancellarii hujus Ecclesie :
qui obiit [Octobris 21^o]
A. D. [1771] ætatis [75.]
Uxorem Annam,
Gulielmi Wottoni, S.T.P.
et Annæ Hammondi filiam ;
et Liberos duos
superstites, reliquit."

tion on his tomb which is in the cathedral of Chichester behind the choir, was written by himself.

He left a large collection of manuscript sermons, which were submitted at his death to the perusal of Dr. Bagot, bishop of St. Asaph; and so favourable was the opinion which this accomplished prelate formed of their merit and usefulness, that he was induced to express an earnest wish for their publication: for some reason however this wish was never fulfilled; they seem indeed to have been dispersed at an early period after his death. Some of them were given at his Lordship's request, to the late bishop of Chichester, Sir William Ashburnham; and were inadvertently burnt at his death with his other papers. Some of them are still left among the manuscripts of the late Dr. Clarke, and others, it is believed, are in the hands of Dr. Stanier Clarke.

The fruit of his happy union with Anne Wotton was three children, two of whom only survived him; namely, Edward, the father of the subject of this memoir; and a daughter Anne, who died unmarried at an advanced age at Chichester, and was buried in a cemetery adjoining the cathedral. To this lady, who seems to have been every way worthy of the stock from which she sprang, Mr. Hayley, who was long her intimate friend and correspondent, addressed some verses upon the fear of death. They have never before been printed; and they are now presented to the reader chiefly with a view of illustrating the character of the lady, and of adding another testimony to the many we shall have occasion to exhibit of the wide diffusion of native talent among the different members of this family.*

* On the Fear of Death;—an Epistle, to Mrs. Anne Clarke, by William Hayley, Esq.

Thou! whose superior and aspiring mind,
Can leave the weakness of thy sex behind;
Above its follies and its fears can rise,
Quit this low earth, and gain the distant skies;
Whom strength of soul, and innocence have taught,
To think of Death, nor shudder at the thought:
Say, whence the dread that can alike engage
Vain, thoughtless youth, and deep-reflecting age;
Can shake the feeble, and appal the strong;
Say, whence the terrors that to Death belong?

Guilt must be fearful; but the guiltless too
Start from the grave, and tremble at the view.
The blood-stain'd pirate, who in neighbouring climes,
Might fear, lest Justice should o'ertake his crimes,
Wisely may bear the sea's tumultuous roar,
And rather wait the storm, than make the shore.
But can the mariner, who sail'd in vain,
In search of fancied treasure on the main;

Mr. Edward Clarke was born at Buxted in 1790. At an early age he was placed under the care of Mr. Gerison, his father's curate, and afterwards became the pupil of Mr. Mark-

By hope deceiv'd, thro' various perils tost,
His strength exhausted, and his viands lost ;
When land invites him, to receive at last,
A full reward, for every danger past ;
Can he then wish his labours to renew,
And fly the port, just opening to his view ?

Not less the folly of the tim'rous mind,
Which dreads that peace it ever longs to find ;
Which worn with age, and toss'd in endless strife,
On this rough ocean, this tempestuous life ;
Still shuns relief, and shakes with abject fear,
When sickness shows Death's friendly haven near.

The love of life, it yet must be confess'd,
Was fix'd by Nature in the human breast ;
And Heaven thought fit, that fondness to employ,
To teach us to preserve the brittle toy.

But why, when knowledge has inform'd our thought,
Years undeciev'd us, and affliction taught,
Why do we strive to grasp with eager hand,
And stop the course of life's quick-ebbing sand ?
Why weakly covet what we can't sustain,
Why dead to pleasure, would we live to pain ?
What is this sentence from which all must fly,
Oh ! what this horrible decree to die ?—
'Tis but to quit, what hourly we despise,
A fretful dream, that tortures as it flies :—
But hold, my pen, nor let a picture stand,
Thus darkly colour'd, by this gloomy hand !
Minds deeply wounded, and by spleen oppress'd,
Grow sick of life, and sullen sink to rest ;
But when the soul, possess'd of its desires,
Glow with more warmth, and burns with brighter fires :
When Friendship soothes each care, and Love imparts
Its mutual raptures to congenial hearts ;
When joyful life thus strikes the ravished eye,
'Tis then a task,—a painful task,—to die.

See ! where Philario, poor Philario lies !
Philario,—late the happy as the wise ;
Connubial Love, and Friendship's pleasing power,
Fill'd his good heart, and crown'd his every hour :
But sickness bids him those lost joys deplore,
And Death now tells him, they are his no more :
Bless'd in each name of Husband, Father, Friend,
Must those strong ties, those dear connexions, end ?—
Must he thus leave to all the woes of life,
His helpless child, his unprotected wife ?
In vain would Faith before his eyes display,
The promised realms of never-ending day ;
While thus to Earth, those lov'd ideas bind,
And tear his lab'ring, his distracted mind.

But lo ! the gates of pitying Heaven unfold :
A form divine descends, on clouds of gold ;
Peace in her eye, and strength with sweetness join'd,
Speak the bright mission for relief design'd.
See ! to Philario moves the flood of light,
And resignation bursts upon his sight.
See ! to the cross which in her hand she bore,
Humbly she points, and bids the world adore ;

land, who was then resident at Uckfield, a small town within the parish of Buxted. He inherited his father's passion for literature, and seems to have trod in many of his footsteps through life. Like him, he was elected fellow of St. John's College, Cambridge; and he also succeeded him, in consequence of the resignation of which we have spoken, in the living of Buxted. But before this event took place, which led to his final settlement in life, he had mingled largely in the active business of the world, and had passed several years abroad in situations from which a man less gifted than himself could not fail to derive many advantages. His first preferment was the rectory of Pepper-Harrow, in Surrey, to which he was presented in 1736 by Viscount Middleton. It is probable, however, that he never resided upon this living; for, in 1760, he

Then sweetly breathing, in his soul inspires,
A Christian spirit, and devout desires:
Hark! his last words!—his dying pray'r's begun;
"Lord! as in heaven, on earth thy will be done!"
Calm in his soul, his painful struggles cease;
He bows adoring, and expires in peace.

Oh Resignation! thou unerring guide
To human weakness, and to earthly pride!
Friend to distress! who can'st alone control,
Each rising tumult in the madd'ning soul;
'Tis thine alone from deepest ills to save,
To soothe the woes of life, and terrors of the grave.
Spirit divine!—support me with thy power!
Shed thy mild lustre o'er each passing hour!
Calm ev'ry trouble, and confirm my mind,
Serene, tho' feeling; cheerful, tho' resign'd!

And thou, my friend! while thus in artless verse,
Thy mind I copy, and thy thoughts rehearse;
Let one memorial, tho' unpolish'd stand,
Rais'd to thy friendship, by this grateful hand!
By partial favour, let my verse be tried,
And 'gainst thy judgment, let thy love decide!
Tho' I no longer must thy converse share,
Hear thy kind counsels, see thy pleasing care;
Yet memory still upon the past shall dwell,
And still the wishes of my heart shall tell;
O be the cup of joy to thee consigned,
Of joy unmix'd without a dreg behind!
For no rough monitor thy soul requires,
To check the frenzy of its vain desires;
No poignant grief, to prove its latent worth,
No pain to wean it from the toys of earth;
But calm and peaceful can alike survey,
This gloomy world, and Heaven's eternal day.

Then while the current of thy life shall flow,
While Heaven yet lends thee to thy friends below;
Round thee may pleasure spread a cheerful scene,
Mild as thy heart,—and as thy soul serene!
And oh! when time shall bid thee yield thy breath,
And take thy passage thro' the gates of Death;
May that last path without a pang be trod,
And one short sigh conduct thee to thy God!

went abroad as chaplain to Lord B-mol, who was a counted ambassador extraordinary to Madrid.

It was during his residence in this capital, that he collected the materials which he afterwards communicated to the world, under the title of *Letters concerning the Spanish Nation*, written at Madrid during the years 1760, and 1761.

On his return to England in 1762 he married Anne, the daughter of Thomas Greenfield, Esq. of Grafton, in the county of Surrey, of whom we shall have frequently occasion to speak hereafter: and in the course of the same year, he accompanied Governor Johnstone to Minorca, in the quality of chaplain and secretary. In 1767 he thought himself called upon, in the exercise of his official duties, to publish a pamphlet, entitled, *A Defence of the Lieutenant-Governor*, in reply to a printed Libel. This work which was dedicated to Lord Northampton at that time president of the council, was written with great ability and spirit: but it seems to have excited some alarm in the mind of his father, who with his characteristic mildness and good sense thus expresses himself to Mr. Bowyer upon the subject of it: "These warm contests about the government of Minorca have affected us: my son, as secretary to the governor, could not avoid having some concern in them, and may perhaps lose his post: but it is a little hard to make persons suffer for what they do by the directions of their superior in office." It is clear, indeed, that such a controversy, however naturally arising from one part of his duty, was not very congenial with the spirit of the other: and although his father's fears do not appear to have been realized, they add force to a lesson which the whole proceeding obviously inculcates, that two such offices ought rarely, if ever, to be united in the same person. Having returned from Minorca in 1768, he was soon afterward inducted to the vicarages of Willington and Arlington, in Sussex, through the interest of his father: and towards the end of the same year, he succeeded to the rectory of Buxted; the permission for his father's resignation having been obtained from Archbishop Cornwallis, through the means of the late Marquis, with whom Mr. Clarke had happily formed a connexion during his residence at Minorca. From this period to his death, which happened in 1786, Mr. Clarke resided constantly upon his living, devoting himself chiefly to the cultivation of letters, and to the care of his parish and family; and occasionally mingling in the peaceful society of the families around, to which his amusing and instructive conversation always rendered him peculiarly acceptable. At the request of his friend Thomas Steele, Esq., recorder of Chichester, he undertook to finish the education of

his two sons: the eldest of whom, the Right Honourable Thomas Steele, was afterward well known in Mr. Pitt's administration; and as long as his health permitted, he was occasionally occupied in engagements of a similar nature. Besides the publications already mentioned, he had a copy of Greek Hexameters, in the *Luctus Academiæ Cantabrigiænsis*, in 1751, on the death of Frederick, Prince of Wales; and, in 1755, he published a letter to a Friend in Italy, and Verses on reading Montfaucon. About this time, also, he had a project, in concert with Mr. Bowyer, of editing an improved Latin Dictionary, by reducing that of Faber from a radical to a regular form; of which, for want of encouragement, only a single sheet was completed: and in 1759, he published a Sermon, preached at the Roll's Chapel, December 9, being the day appointed to return thanks to Almighty God for a victory over the French fleet, the 20th of November. Besides the tribute to his father's memory already mentioned, he drew up several Latin epitaphs, one of which, in honour of his friend and instructor, Mr. Markland, we shall subjoin.*

* This inscription was written soon after Mr. Markland's death:

“*Memoriæ Sacrum*
JEREMIE MARKLANDI:
 Qui, quamquam splendidiore eum
 et literæ et virtutes ornaverant,
 semper modestissime se gessit:
 omnes benigne, doctos urbanè
 et, quod mirare magis,
 etiam indoctos sine supercilio excep
 In restituendis et explicandis
 Græcis et Latinis Poetis,
 Statio, Euripide, Horatio, Juvenale,
 et præcipue Novi Fœderis libris,
 cautus, acutus, felix,
 et, si quando audacior,
 tamen non inconsultus:
 In edendis Maximo Tyrrio et Demosthene
 cum Davilio et Taylora conjunctus
 utrique et auxilio et ornamento fuit.
 Sequantur alii Famam,
 aucupentur Divitias,
 Hic illa oculis irretortis contemplatus,
 post terga constanter rejecit.
 A costu tandem et communione omnium
 per hos triginta annos proxime elapsos
 in solitudinem se recepit.
 studiis excolendis et pauperibus sublevandis.
 unice intentus.
 Memoriæ viri sibi amicissimi,
 et præceptoris et parentis loco,
 viri candore, humanitate, modestiâ, doctrinâ,
 religione demum ornatissimi,
 dat, dicat, dedicat,
 olim Discipulus.
 Obiit prope Dorking, in comitatu Surrie,
 Julii 7^o, 1776,
 annam agens octogesimum tertiam.”

Nor should we omit to mention, that towards the latter part of his life, he contemplated a folio edition of the New Testament in Greek. His intention was to have printed the text after the impression of Dr. Mill, with select notes from the most celebrated critics and commentators—specifying either in the prolegomena, or the notes, the alterations which Mill had proposed. His own copy prepared for this purpose, and another interleaved and filled with notes by his father, are still in the possession of Dr. Stanier Clarke.

It is much to be regretted, that this project, which was altogether worthy of his learning and office, and for which he had such ample stores provided, both of his own and his father's, never proceeded farther than the printing of the proposals; nor is any reason assigned, in Mr. Nichols's Anecdotes, for its being abandoned; but, as his health seems to have declined several years before his death, it is not improbable that the indolence and want of exertion, which indisposition is too apt to produce, might have been the cause, that neither this, nor any other of his literary labours, ever afterward appeared before the public. He died at Buxted, in 1786, and was buried in the chancel of his own church.

Mr. Clarke left three sons and one daughter, the youngest of the family. Of these, Edward Daniel, the subject of these memoirs, was the second. He was born, as we before stated, at the vicarage-house of Willingdon, in Sussex, in the short interval which elapsed between his father's return from Minorca, and the removal of his family to the rectory at Buxted. His elder brother, Dr. James Stanier, who is well known to the literary world by his various publications, was born at Minorca: he has had the honour to be domestic chaplain to his present Majesty, both before and since his accession to the throne, and is now a canon of Windsor, and rector of Tillington in Sussex. The younger, George, was born at Willingdon: he was a captain in the navy, and after many years of distinguished service, was unhappily drowned in the Thames, on a party of pleasure, in 1805. His sister Anne, married to Captain Parkinson of the Navy, and now living at Ramsgate, was born after the settlement of the family at Buxted.

Edward Daniel Clarke is represented to have been from his infancy a most amusing and attractive child; and particularly to have exhibited in the narrow sphere of his father's parish, the same talent for playful conversation and narrative, which ever afterward distinguished him in the various and extensive circles, through which he moved. He was the special favourite of the poorer neighbours and of the servants in his father's family; and his sister well remembers the delight which sat upon

the countenance of every domestic, when master Ned could be enticed from the parlour to recount his childish stories in the kitchen. Indeed, it should be remarked, that to the last moment of his life, his manner to servants and inferiors was unusually kind and considerate ; at the same time, it was such as savoured more of benevolence than of familiarity, and, though it invariably created attachment, it never diminished the respect due to himself. On the pursuits which occupied his childish years, it would be idle to dwell at any length ; but, from circumstances which have been communicated to us, it may be worth while to state, that he showed when very young a decided inclination to those objects of science, which were the favourite studies of his later years : nor were there wanting at this early period many striking indications of that ardent and enterprising spirit, which, whether it led him to distant regions in pursuit of knowledge, or prompted him to labours and experiments at home, was ever afterward incessantly at work within him : rising, indeed, in its aims and objects as he advanced in years, and appearing to burn with a brighter and a purer flame, in proportion as the frail tenement in which it dwelt was hastening to decay. But as little traits of conduct, and even occasional observations, under particular circumstances, serve more effectually to give an insight into character, than the most laboured attempts at description, we have thought it right to insert the following stories, communicated by his sister, as being better calculated to show what sort of a boy he was than any thing we can say.

Having upon some occasion accompanied his mother on a visit to a relation's house in Surrey, he contrived before the hour of their return, so completely to stuff every part of the carriage with stones, weeds, and other natural productions of that country, then entirely new to him, that his mother, upon entering, found herself embarrassed how to move ; and, though the most indulgent creature alive to her children, she was constrained, in spite of the remonstrances of the boy, to eject them one by one from the window. For one package, however, carefully wrapped up in many a fold of brown paper, he pleaded so hard, that he at last succeeded in retaining it ; and when she opened it at night after he had gone to sleep, it was found to contain several greasy pieces of half burnt reeds, such as were used at that time in the farmers' kitchens, in Surrey, instead of candles ; which he said, upon inquiry, were specimens of an invention that could not fail of being of service to some poor old women of the parish, to whom he could easily communicate how they were prepared.

Another childish circumstance, which occurred about the

same time, is worthy of recital, not only because it indicates strongly the early prevalence of the spirit to which we have alluded, but because it accounts in some measure for the extraordinary interest he took throughout his life in the manners and the fortunes of gypsies. At this period, his eldest brother was residing with his relations at Chichester; and, as his father's infirm state of health prevented him from seeing many persons at his house, Edward was permitted frequently to wander alone in the neighbourhood, guarded only by a favourite dog, called Keeper. One day, when he had stayed out longer than usual, an alarm was given that he was missing: search was made in every direction, and hour after hour elapsed without any tidings of the child. At last, his old nurse, who was better acquainted with his haunts, succeeded in discovering him in a remote and rocky valley above a mile from his father's house, surrounded by a group of gypsies, and deeply intent upon a story which one of them was relating to him. The boy, it seems, had taken care to secure their good will with some victuals which he had brought from his mother's pantry; and they, in return, had been exerting their talents for his amusement. Many of the stories which he thus obtained were treasured with great delight in his memory, and often brought out, as occasion served, for the amusement of his rustic audience.

He received the rudiments of his education at Uckfield, under the same Mr. Gerison whom we have already noticed; a clergyman, whose singular habits and scraps of learning are still remembered and talked of in that village and its neighbourhood. He had been long ago the curate of the grandfather; and, having had the care of the son, was now intrusted with the education of the grandson. What progress Edward Clarke made in grammar under this veteran schoolmaster does not appear; but it is evident from the following story, that, whether from his master or his schoolfellows, or both, he had imbibed a very barbarous pronunciation of his mother tongue.

In the later years of his life, Mr. Clarke's health so far declined, as to render the duty of the church, particularly in Lent, extremely fatiguing to him; and not thinking himself justified, under the circumstances of his family, in incurring the expense of a curate, he had been persuaded by his friends to allow his son Edward to relieve him, by reading one of the lessons. Accordingly, upon a day appointed, Edward took his station in the desk beside his father; and when the time for his part arrived, began, with a voice which was always strong and sonorous, to read aloud the chapter allotted to him. It happened to be the 10th of St. Luke, which contains the story of the good Samaritan. The affair went on tolerably well for some

time ; but when he arrived at the 35th verse, and had uttered with a genuine Sussex twang ; " And on the morrow, when he departed, he took out *tuppence*, and gave them to the host," his father, unable any longer to tolerate the sound, and dreading something more of the same character, gave him secretly a sharp twitch on the foot, and pushing him impatiently away, finished the lesson himself. Nor could he ever afterward be prevailed upon to renew the experiment. Under such unlucky auspices did the subject of this memoir commence the practice of an accomplishment, which, in after life, he carried to so great a degree of perfection, that no one ever heard him in private reading or recitation, or in the exercise of his public duties as a lecturer or a preacher, without being struck with the correctness of his pronunciation, and delighted with the sweetness of his voice, and the skill and good taste with which he managed it.

In 1779, being somewhat more than ten years old, he was removed from his village preceptor, and sent with his two brothers to the grammar school of Tunbridge, at that time conducted by Dr. Vicesimus Knox. But here his progress did not seem to be very satisfactory. Dr. Knox acknowledged his abilities ; nor was it probable indeed, that an intelligent mind like his could be insensible to the existence of talents which were obvious to every ordinary observer ; but he was soon compelled to complain that his pupil was deficient in application. To many, who have witnessed the laborious habits of his later days, this report will probably appear extraordinary ; and to others, who were acquainted with many traits of patient industry exhibited by him even at the time we speak of, we know that it has appeared erroneous. But, notwithstanding this persuasion, there cannot be the slightest doubt of the justice of the complaint, so far as the usual objects of boyish education were concerned ; for, besides the unquestionable authority upon which it rests, the fact was well known to his schoolfellows at the time, many of whom are now living ; and was decisively confirmed by the state of his classical acquirements when he came to college.

In truth, his case, though rare, is by no means singular : nor are such instances confined to great schools, although they are certainly much more likely to occur where the superintendence of the principal is extremely subdivided, than where the smallness of the number will admit of more individual attention and more discriminating care. It happens unavoidably in seminaries, where many boys are classed and taught together, that only one plan of instruction and one class of stimulants can be employed. Now admitting, what many would be disposed to

question, that for every practical purpose the same mode of instruction may be equally applicable to all, it is obvious that the effects of the same stimulants must be as various as the dispositions which are submitted to them; and since the different progress of boys will depend not only upon the measure in which the powers of memory, perception, and attention, are severally possessed by them, but also upon the degree in which they are excited and developed by the means employed, it may and does frequently happen, that a boy of good natural parts will fail of making an adequate advancement among his schoolfellows, merely from the circumstance of these stimulants not being such as would be the most effectual with him.

But if, in addition to this want of sensibility to the ordinary excitements, he should have imbibed an early taste for some particular pursuit, foreign to the immediate business of the school, and should possess withal the means of indulging it, the evil is then greatly aggravated. The powers of his mind become diverted from their appropriate labours to others which are less suited to his age, and of course less profitable to him: and his improvement in the school is impeded not only by the time occupied in his favourite pursuits at the expense of his allotted task, but also in proportion as the pleasure he derives from the studies of his own choice indisposes him for those which, besides their having no apparent object, are only associated in his mind with ideas of punishment and privation. For this evil, which, when it has once begun, every succeeding day renders more inveterate, a large school affords no prospect of relief; for however accessible a boy's mind may be to some of his schoolfellows, it is generally closed to the master, who, having no clue to the cause of his failure, would be at a loss to administer the proper remedy, even if the choice were ready to his hand.

Such, we apprehend, was the case with Edward Clarke; for, while he had justly enough the character with his master of being an idle boy, while he was notorious with his schoolfellows not only for the neglect of his own exercises, but also for the ingenious and good-natured tricks which he played to interrupt the labour of others, he had his own studies, which he was delighted to cultivate, and his own quiet hours which he contrived to set aside for them. It is communicated to us, upon the best authority, that he was in the habit of saving his pocket-money to buy candles, and that, after his schoolfellows were asleep, and all the house at rest, he would settle himself in bed comfortably for reading, and occupy his mind with some favourite book: and that, one night in particular, having pursued his studies longer than usual, and sleep having crept upon him un-

awares, he was only prevented from being burnt in bed by the seasonable arrival of the usher, who happily came in at the very moment when the bed-clothes had taken fire.

It cannot be questioned that these eccentric habits have their enjoyments; it may also be true, that in particular cases they lay the seeds of future compensation in the independent character which they give to a man's exertions in his future life, and in the habit which they nourish and support of seeking pleasure from study, distinct altogether from a sense of the advantages to which it leads; a pleasure which no one possessed more amply, or relished more keenly, than he of whom we speak. But lest any one, who may chance to read these pages, should be disposed to imitate his example, or to look upon it with complacency in others, it cannot be too strongly urged, that the experiment is exceedingly perilous, and would rarely be successful, even in the partial view we have mentioned; that the loss arising from it is immediate, decisive, often irremediable, and sometimes nothing less than utter ruin to the boy; while the advantage is distant, obscure, and to the last degree uncertain; capable of being reaped only by a few, and, even with these, dependent upon a fortunate concurrence of circumstances which can rarely be supposed: and, lastly, that Dr. Clarke himself always felt very sensibly, and regretted most forcibly, the disadvantages under which he laboured from his neglect, in his earlier years, of the ordinary school studies.

What those attractive subjects were which thus engrossed the attention of Edward Clarke, to the manifest injury of his classical progress, it is difficult for us to know; but that some of them at least referred to popular experiments in chemistry and electricity, may be clearly inferred from several humorous exhibitions which he used to make in his father's house during the holydays, to the entertainment, and sometimes to the dismay, of the neighbours and servants, who were always called in upon these occasions to witness the wonders of his art. In the pursuit of these experiments, it is remembered that he used, in spite of the remonstrances of the cook, to seize upon tubs, pots, and other utensils from his father's kitchen, which were often seriously damaged in his hands; and that on one occasion he surprised his audience with a thick and nauseous cloud of fuming sulphureous acid, insomuch that, alarmed and half suffocated, they were glad to make their escape in a body as fast as they could. It does not appear, however, that his attachment to these sedentary pursuits prevented him from partaking in the active pleasures and amusements which were suited to his age, and in which his light and compact figure, uniting great agility with considerable strength, was calculated

to make him excel. Every sort of game or sport which required manliness of spirit and exertion, he was ever foremost to set on foot, and ever ready to join ; but in running, jumping, and swimming, he was particularly expert.

By these exercises he was unconsciously preparing himself for those difficulties and hardships which he had afterward to encounter in his travels ; and to his skill in swimming, in particular, he owed very early in life the delight, which no one could feel more strongly than himself, of saving his younger brother, George, from that death which seemed by a fatality to await him. He was one day seized with the cramp while bathing in the moat which surrounded his father's house, and having already sunk under the surface in the sight of the servant who had charge of him, he would inevitably have been drowned, if Edward, who had been alarmed by the man's cries had not plunged immediately to his relief, and dragged him by his hair to shore.

But this boyish portion of his life was destined to be short : for, in the spring of 1786, when his father's illness had taken a more decided turn, and serious apprehensions were entertained of a fatal termination of it, it was thought advisable to hasten his departure for the University. He was only sixteen years of age, and there was clearly no reason arising from his proficiency, which called for this early admission to an academic life. But an opportunity had offered, through the kindness of Dr. Beadon, one of his father's friends, then master of Jesus College, at Cambridge, and now the venerable Bishop of Bath and Wells, of obtaining for him the chapel clerk's place in that society ; and the advantage was thought too important, in the critical circumstances of the family, to be neglected. Accordingly, about Easter of that year, he was removed from Tunbridge school, and sent to take possession of his office in Jesus College, to which several active duties were attached. But before we lose sight of Tunbridge school, in which he seems to have passed his time with some profit and much happiness, it is due both to the master and to the scholar, more especially after what has been already said, to state, that the first recorded effort of his muse is a sort of thanksgiving ode upon the recovery of Dr. Knox, from a dangerous illness in 1785. It was not a task imposed upon him, but the spontaneous effusion of his own grateful heart, under a strong sense of the care and kindness he had experienced from his master. The composition, although respectable as coming from a schoolboy, is not of sufficient merit to entitle it to insertion.

Having remained at College, in the exercise of his office, till the period of the Commencement in that year, he returned

to spend his summer vacation under his father's roof: and, at the close of it, he once more took leave of his parents, to fix himself permanently in College. The parting upon this occasion, between himself and his mother, to whom he was tenderly attached, is described as having been particularly painful. The moment, indeed, was critical for both. The rapid decline of his father's health could no longer be concealed from the son; and, under the melancholy forebodings of a calamity, so fatal to her own happiness, and so threatening to the prospects of her children, it was no wonder that "all a mother's fondness should be in her eyes, and all her tender passions in her heart." But the prudence of the friend was not lost in the affection of the parent; and while the feelings of her son, naturally warm and passionate, were unusually excited, she took advantage of the occasion to prepare him for the sad but instructive lesson that he would soon be called upon to practise. She imparted to him the actual circumstances of the family, and their future prospects; she did not conceal from him that their main support depended upon the precarious tenure of his father's life; that his immediate allowance from them could be but small; and that, in the event which they had so much reason to dread, he would have to depend altogether upon his own exertions for his future advancement in life. The effect of this confidence was such as might naturally be expected upon a generous and affectionate mind. He quitted her under the strongest emotions of grief, but with the most solemn pledge—a pledge which, to his honour be it spoken, he did more than keep—that, from that time, whatever difficulties he might have to encounter (and many and trying to our knowledge have they been,) he would contend with them alone; that his own exertions should be indeed his sole dependence; and that no emergency whatever should induce him to apply to his parents for further pecuniary aid. From that hour he saw his father no more; but a strong impression was left upon his mind by this affecting scene; and the event which quickly followed, only served to fix it there more deeply. His father's disorder terminated sooner than was expected. Within a few weeks after his departure, his brother James (who had been for some time at St. John's College) and himself received a summons to attend his death-bed. But they arrived too late. Of all his children, his daughter only was present at his last moments; and the circumstances which preceded and accompanied his death have been communicated by herself, with so much truth and feeling, that it has been thought proper to give them in her own words. "A flattering change had taken place in my father's health; his hearing, which had been much impaired, was

almost entirely restored. He was able to return to his books, and to read to his family aloud in the evening ; and had begun to revise his History of Spain, probably with a view to another edition. These deceitful prognostics had raised the liveliest hopes in the minds of his family and friends. His neighbours again resorted to his house, to enjoy his delightful and improving society ; and it was while he was surrounded by these, in the full flow of conversation, even while the unfinished sentence lingered on his lips, that his tongue faltered,—his hand sunk, a painful struggle was visible, and the voice, beloved and revered, had ceased for ever. During two days he lingered speechless ; and, before his two eldest sons could arrive from College, or the youngest from school, his sufferings were over, and his wife and children were doomed to experience that severe reverse of fortune, so frequent in the clerical profession. A short time after, at midnight, the post-chaise, which contained James and Edward, drove up to the door. Their mother was in bed : they flew with filial affection to her chamber, and, kneeling down beside her in speechless grief, mingled their tears with hers. Young and fatherless—just entering into life, and thus rudely checked on the very threshold of it—their lot seemed to be lamentable indeed. Years have since passed away, and other griefs have been allotted to me ; but the recollection of that night of sorrow can never be effaced from my mind."

There is certainly no calamity in life more trying to a young family, than the loss of an intelligent and affectionate father. But, perhaps, there is an acuteness of feeling in the preceding description, surpassing the sorrow which such a loss, however grievous, would commonly inspire. Mr. Clarke, it should be observed, had enjoyed a considerable income from his preferment for many years ; but he had always lived hospitably and liberally, and had spared no expense in the education of his children. Thus, a severe alteration in the circumstances of the family ensued at his death ; and, as his daughter was at that time old enough fully to comprehend the different bearings, and the full extent, of their calamity, we cannot wonder at any strength of expression, which even the remembrance of such a scene may have suggested to her.

CHAPTER II.

His education at Cambridge—Studies and occupations there—Bachelor's degree—First engagement as private tutor—Tour through England—Publication of his first work.

It is pleasing to record, that, by the blessing of that Providence, to whom the widow and the fatherless are said to be a peculiar care, the evils which the family of the deceased Mr. Clarke had to encounter, were much less serious than they had reason to fear. Comfort sprang up for them on every side, and from quarters where they had little reason to expect it; and that too of a nature calculated not only to soften their actual distress, but to disperse the gloom which hung over their future path. Amidst all their privations there was one species of property which they possessed in ample portion, viz. the good name of those who had preceded them. And who shall pretend to calculate the value of this inheritance? Its benefit is often great when dependent upon no stronger ties than those which accident or relationship have created; but, when it flows from friendships, which have been consecrated by piety and learning; when it is the willing offering of kindred minds to departed worth or genius, it takes a higher character, and is not less honourable to those who receive than to those who confer it. It comes generally from the best sources, and is directed to the best ends; and it carries with it an influence which powerfully disposes all worthy persons to co-operate in its views. Nor is this all. The consciousness of the source from which it springs, is wont to stimulate the exertions, and to elevate the views, of those who are the objects of it: and many instances will occur to our readers, of persons who have laid the foundation of the very highest fortunes both in church and state, upon no other ground than that which this goodly inheritance has supplied.

Of such a nature was the kindness, which this family now experienced. Their father himself had, in the course of his academic life, formed many valuable connexions;—and the virtues of mild William Clarke were still fresh and honoured in the recollection of his surviving friends. Most of these came readily forward upon this distressing occasion, and with equal delicacy and kindness, offered their assistance and advice. Among them may be mentioned with honour, Dr. Bagot, Bishop of St. Asaph; Sir William Ashburnham, Bishop of Chichester; and Dr. Beadon, Master of Jesus College; who.

not content with interposing that seasonable and friendly aid which the exigencies of the moment required, continued afterward their valuable assistance to the children, upon many important occasions of their lives. Nor were the immediate neighbours and friends of Mr. Clarke less desirous of contributing their portion of comfort. George Medley, Esq. the possessor of Buxted Place, was particularly distinguished by his kindness to Mrs. Clarke, and her family. In addition to other substantial proofs of it, he obtained for her youngest son, George, by the benevolent exertion of his interest, an appointment in the Navy; and it is understood that the same interest was afterward very instrumental in procuring his advancement in that profession.

In Mr. D'Oyly, who was shortly after appointed to succeed Mr. Clarke in the Rectory of Buxted, they found a person ever disposed to treat them with the liberality of a gentleman, and the kindness of a Christian. All claims to dilapidations was waived, and Mrs. Clarke was invited to remain in the rectory-house as long as her convenience or comfort might require; a permission of which she took advantage till the ensuing April, when she retired to a small house in the neighbouring town of Uckfield.

In this situation she was enabled for many years to continue her intercourse with many excellent and sincere friends, by whom she was esteemed and beloved; and it is honourable both to her and to them to state, that in her reduced and humble circumstances, she was treated with as much respect, and with more kindness, than in the days of her prosperity. But it was in the bosom of her own family, in the kindness and affection of her children, that she found her best consolation. In this labour of love, Edward was neither the least forward nor the least successful. The buoyancy of his spirits, joined to the delicacy and tenderness of his mind, made him at all times an excellent comforter: and often both at that season and afterward, when he saw his mother's countenance dejected, and her spirits drooping, he would ever suggest some cheerful thought, or practise some playful endearment, to draw her, as it were, away from her sorrows, and to restore her to her former cheerfulness. And seldom were these endeavours vain; "the few," says his sister, "who yet live to recollect him in his maternal dwelling will bear testimony to the charm of his filial affection; they will remember how often the midnight hour passed unheeded, while all were delighted with the witchery of his conversation, and his mother's countenance was lighted up with smiles." Soon after the death of their father, the two eldest sons returned to College; and Edward, having

now acquired a melancholy title to one of the scholarships of the society of Jesus College, founded by Sir Tobias Rustat, for the benefit of clergyman's orphans, was elected a scholar on this foundation immediately upon his return. The emoluments of his scholarship, joined to those of an exhibition from Tunbridge school, and the profits of his chapel clerk's place, amounting in the whole to less than 90*l.* a year, were his principal, indeed it is believed his only, resources during his residence in College : and, however well they may have been husbanded, it must be evident, that even in those times of comparative moderation in expense, they could not have been sufficient for his support, especially when it is understood, that he was naturally liberal to a fault. It does not appear, however, that he derived during this time any pecuniary assistance from his father's friends ; and as there is the strongest reason to believe that he faithfully adhered to the promise he had made to his mother, that he would never draw upon her slender resources for his support ; it may excite some curiosity to know by what means the deficiency was supplied. The fact is, that he was materially assisted in providing for his College expenses, by the liberality of his tutor (Mr. Plampin,) who, being acquainted with his circumstances, suffered his bills to remain in arrear ; and they were afterward discharged from the first profits he derived from his private pupils.

It was upon his return to college, after his father's death, that the author of this memoir first became acquainted with him. He had just come into residence himself, and there were many coincidences in their College life, which naturally threw them much together. They were of the same age, and the same year ; of course occupied in the same public studies, and the same lectures : both orphans of clergymen, and both Rustat scholars ; and with this perhaps fortunate distinction only, that being born on different sides of the Trent, they were originally precluded by statute from being competitors for the same college preferments. The acquaintance, begun under this happy concurrence of circumstances, was quickly ripened by youthful confidence into a sincere and ardent friendship ; a friendship heightened, not more by pleasures, which a similarity of taste enabled them to enjoy in common, than by a sense of mutual kindness, which the difference of their characters and acquirements furnished perhaps more frequent occasions of indulging : a friendship, in short, which was afterwards carried with them, unimpaired, into the business of the world, confirmed by habit, as well as taste, under

all the occurrences of their lives, and prolonged by the most unreserved intercourse, whether they were together or separate, until terminated by death.

The three years which Edward Clarke spent in College, before he took his Bachelor's Degree, present few incidents of life, and few points of character, proper to be intruded upon the attention of the reader; nor has there been found a single academical composition written by him at this time, in any department of learning, either in prose or verse, which would be considered worthy of his subsequent fame. Indeed, it is not the least extraordinary circumstance in his history, that this critical period, which generally lays the foundation of other men's fortunes, and exercises the greatest influence upon the conduct of their future lives, was suffered to pass by him, not only without academical honours or distinctions of any kind, but apparently without fixing any character whatever upon his literary views; and evidently without even those moderate advantages which a common mind might have derived from it. The loss itself, however, is much more easy to account for, than the singular vigour of mind, with which he afterwards redeemed it. In Jesus College, as well as in many others, mathematical studies formed then, as they do now, the principal path to College honours and emoluments. To these, of course, the chief attention of the youth, and the principal encouragement of the tutors, would be directed. But Edward Clarke had unhappily no taste for this branch of learning, and therefore made little progress in it; and as for classics, in which, as has been before observed, he came up with a moderate knowledge, there was nothing at that time, either in the constitution or the practice of the College, calculated to encourage a taste already formed for them, much less to create one where nothing of the kind was felt before. All the classical lectures, which it is remembered, were given during the three years of his residence, were confined to the two little tracts of Tacitus, *De Moribus Germanorum*, and *De Vita Agricolaë*; and the only other occasions upon which he was called upon to revive his classical knowledge, were the delivery of a Latin declamation in the chapel once a year, and the usual examinations of the Rustat scholars at Easter, for which latter no great preparations was required. Under these circumstances, with a strong literary passion, and at sea, as it were, without a pilot upon the great waters of mental speculation, it was natural for him to form his own plans, and to steer his own course; and, accordingly, his College life may be said, with a few slight deviations, to exhibit an obvious con-

uation of the track which he had adopted at school ; the same languid and capricious efforts in the regular studies of the place ; the same eagerness in the excursive pursuits of his own choice ; and the same playful, and welcome interruption of the more measured and regular labours of others. Hence it happened, that, though he was considered, by all who knew him, to be a very delightful fellow, his real character was understood by none : and as the higher powers of his mind were not yet sufficiently developed, and scarcely known even to himself, his literary pretensions were ranked by his contemporaries at a low rate, and the promise of his future life regarded by those who loved him with considerable alarm. To one, however, looking back upon those years which now seem very short, and which, owing to his friendship, have been always numbered among the most agreeable of his life, it sometimes appears that in this estimate there was a want of discernment among his contemporaries themselves. Even in that season of apparent indolence and real trifling, there was much in the character and furniture of his understanding that was instructive, as well as all that was delightful. It was impossible to mingle intimately with a mind of so much ardour, fancy, and benevolence, and, it may be added, purity, without reaping from it many great advantages : and, when the author of this memoir is disposed to trace to their source, as men are sometimes wont to do, the advantages as well as the defects of his own education, he is led to conclude, that much of the intellectual pleasure he has since derived from certain valuable sources, may be imputed to the cultivation of a taste, which was at first nurtured, if not imbibed, in his society. Indeed, there is reason to believe, that with more actual knowledge, Edward Clarke possessed a consciousness of greater capabilities, than his friends then gave him credit for ; and, certain it is, that there frequently came across his mind, visions of brighter scenes and aspirations after higher destinies, than seemed at that time ever likely to attach to him. There remains among his papers, at this moment, a manuscript dissertation of his own, upon the comparative antiquity of the Jews and Egyptians, written as he himself records in the margin, at seventeen years of age, in consequence of a dispute with his brother upon this subject, and exhibiting great spirit and considerable research. But the most curious and interesting proof that his imagination was sometimes haunted by ideas of future distinction, is communicated by his sister, on whose affectionate heart every circumstance relating to her brother seems to have been indelibly impressed. "In

one corner of our abode," she says, "was a small apartment occasionally used for books, and papers of every kind, which now bore the dignified title of a study: here my brother had placed two black backed easy chairs, where he would sit with his sister for hours and hours building airy plans of future actions. Look! he would exclaim, look upon that shelf where appear three generations of my ancestors: Wotton's Welsh Laws, Clarke's Connexion of Coins, and our father's Travels in Spain. And shall my works ever stand beside them? Never will I cease, never will I say enough, until my own books shall appear with them in that shelf beneath my mother's roof." His wish was partially fulfilled; two volumes of his youthful works did find a place on that very shelf to his mother's admiration and delight; but, long before the full completion of the prophecy, before the elaborate productions of his maturer years could claim under his mother's roof a divided honour with those of his ancestors, the kind parent who inhabited it was no more, and one earthly object of his literary labours was never obtained.

Notwithstanding the eccentric habits, which have been imputed to him, it is remarkable that, in every thing which related to the regulations and discipline of the College, his conduct was most exemplary. At chapel and lectures he was always present and always attentive; and, though in the latter the advances of his own mind by no means kept pace with the progress of the tutors, he had always something pleasant to say or do, connected with the subject, which was sure of disarming reproof, and suggested the appearance, or at least the hope of improvement. In the exercise of his office, more particularly, of chapel clerk, he was scrupulously and conscientiously correct; and it ought not to be omitted, that in his English declamations, the only species of College exercise in which the state of his acquirements offered him a prospect of success, he bestowed great labour, and both merited and obtained considerable credit. The style and the manner of his compositions were always much admired, particularly by his contemporaries; and so much pains did he take with the delivery, that he used to bring his declamation rolled and sealed up into the chapel, and retain it in that shape during the whole of his repetition. On those accounts, as well as from his attentive and attractive manners, he was justly in great favour both with the master and the tutors. Every advantage, which might be considered as the fair reward of regularity and attention, was bestowed upon him; and not a single instance is remembered, in which he received a College punishment or an admonition of any kind. Nor was his aca-

demical regularity more remarkable than the sobriety and correctness of his whole demeanour at this period. From excess of drinking, which was the prevailing vice of the place and of the day, he was particularly averse ; and though fond of society, and always acceptable in it (the natural state of his spirits being at least upon a level with the half-intoxication of his friends,) he was ever upon his guard, ever watchful of the moment when the gayety of the party was likely to degenerate into excess, and certain of finding some plausible pretext, or inventing some ingenious scheme for making his escape.

These happy exemptions from the popular failings of his age, to which men of more regular minds sometimes fell a sacrifice, and in which others unhappily made their boast, must be attributed to his early moral habits, and to the excellent religious principles he had imbibed at home. But there was another motive at work within him, forcibly operative in these, but much more obvious in other, restraints which he imposed on himself; and that was the peculiar duty, which the pledge he had given to his mother demanded from him, of avoiding every wanton and unnecessary expense, and of recommending himself by all honourable means to the College authorities.

That the recollections of his biographer, which have been always vivid in every thing relating to him, have not failed in these particulars, may be inferred from a poem written by him at this period, the character and sentiments of which, not only accord with the course of conduct imputed to him, but must be thought highly honourable to the feelings and state of mind of a youth not eighteen years of age, naturally gay and festive in his temperament, of strong passions, and placed in a situation where so many circumstances tempted him to excess. The occasion on which they were written, was some severe family misfortune : the time night ; the scene, the grove of Jesus College : a quiet and secluded spot, sufficiently distant from the body of the building to prevent the sounds of revelry from being heard, but near enough to allow the lights from the windows of a large wing of it to gleam from different quarters upon his eyes, as he turned occasionally in his walk.

Enwapt in meditation's pleasing dreams,
 Musing and melancholy here I stray ;—
 Where often at this solemn, silent, hour,
 To ease a mind, oppress'd with heavy wo,
 Secluded from the noisy crowd I rove,
 And tell my sorrows to the silent moon.
 A night like this suits well a heart like mine,
 Congenial to the tenor of my soul !
 How awful, and how silent is the scene !
 No sound existing, 'tis as nature slept,
 And, sinking from the busy hum of day,

Enjoy'd the sweet repose herself had made ;
 Save where yon bird of night with omens dire,
 Portentous to the superstitious mind,
 Perch'd in a nook, with stiff imperial nod,
 Blinks consequential, flaps its wings, and screams ;
 Save where the wind deep murmuring through the gloom
 And my own footsteps, strike the attentive ear,
 Now o'er the world sleep spreads her soft domain,
 And night in darkness veils her sable head.
 To some her shades terrific horror bring,
 To me thrice welcome, clad in darkest hue.
 The copious bowl, the Bacchanalian song,
 The loud full chorus, and the bumper'd glass,
 The choice amusements of the clam'rous crew,
 In all their mirth, afford no joy to me.
 For what avails a momentary glee,
 When grief and care sit heavy at the heart ?
 Can aught derived from drunkenness and noise,
 Dull wit, and blasphemy, and jest obscene,
 With all the boastings of the vicious mind,
 Allay the sufferings of a sorrowing heart,
 Or ease the bosom of its load of woe ?
 In the cold cloister at the midnight hour,
 When lamps dim glimmering cast a misty light,
 When students close their philosophic lore,
 And dream of definitions dullness gave,
 To darken science, and obscure her laws,
 To check imagination's glowing fire,
 And curb the genuine ardour of the soul ;
 To lead the mind in intricate amaze,
 From unaffected purity of thought,
 To doze o'er *Vince's* soporific draughts,
 To wander wild in scientific terms,
 Through inconceivable infinity :
 When Bacchus sends his reeling vot'ries home,
 To snore* in sleep the potent fumes away,
 My evening task begins. Silent and sad,
 I close the page where truth and wisdom shine,
 Such truth as Newton brought from God to man ;
 Such wisdom as the son of science gave,
 To cheer and light the darkness of mankind.
 Immortal sage ! illumined nature hails
 Thy heaven-taught soul, that made creation glow,
 And sol's meridian glory beam anew.
 But here, O Pope, I drop my humbler pen,
 Unfit for themes immortal as thy song.
 This praise, mellifluous muse, is justly thine ;
 Whilst I the meaner bard, must seize thy lyre,
 Catch thy own words, and give my song thy fire :
 ' Nature, and nature's laws lay hid in night,
 ' God said—let Newton be ! and all was light !'
 The paths of science ere that light appear'd,
 Were wilder'd in a chaos, dark and drear ;
 Wisdom in dim obscurity was veil'd,
 Till Newton's genius soar'd in flight sublime,
 And bade the clouds of error glide away.
 Here oft enraptured I delight to walk,
 To raise my mind from ev'ry thought below,
 And view the spangled firmament above.
 Approach, thou atheist ! cast thine eyes from earth,
 Nor vainly dare to doubt on things below.
 Rebellious mortal ! here's a sight for thee ;
 In the vast regions of ethereal space
 Behold the wonders of the King of kings—
 Millions of flaming orbs, suns, systems roll,
 Harmoniously confused.

* Sleep—or drown.

Thus far Dr. Clarke composed the poem at this time. He concluded it as follows in some subsequent period of his life.

Dost thou still doubt
The first great cause, the will of the supreme ?
Does not yon orb with its resplendent light
Dazzle the darkness of thy impious mind ?
Or canst thou scrutinize the works of God ;
Observe the planets in their orbits move,
And say they strike not light upon thy soul ?
The light of truth, whose radiant piercing beams,
Shall still o'er pride and prejudice prevail.
Vain impious man ! expand thy narrow soul,
And check that vice which gave thy madness birth ;
Let reason's dictates still exalt thy mind,
Above those joys that glitter to betray,
The love of novelty and love of fame.
Oft when oppressed, dejected, and forlorn,
With heart brimful of sorrow and of care,
Impiety has tempted me aside,
To doubt the goodness of my Maker's works,
Arraigning proud the equity of God.
'Twas thus in youth, when ev'ry trifling wo,
When every little cloud that cross'd my breast
Expired in folly, doubt, and discontent.
But when by riper years to manhood brought,
How oft astonished have I gazed around,
And view'd in ev'ry object that appear'd,
The Deity display'd, and all his power ;
Beheld in every herb, in every plant,
In every living thing of air and earth,
A dread omnipotent eternal king,
All wise—all merciful—supremely just ;
Who from the heav'n of heav'ns, ere time began,
Cast his broad eye upon a chaos vast ;
And when all nature in confusion join'd,
Dispelled the darkness, bade the light appear,
Whose heav'nly Spirit on the waters mov'd,
And with a voice that made creation shake,
Bade anarchy and chaos rule no more.
In silent admiration oft I've stood,
Till every sentiment his works inspired,
Till every grateful thought his mercy raised,
Has burst in eager transports from my lips,
And kneeling to the throne of grace exclaimed,
Lord what is man ! a creature but of dust !
Impious and proud, and arrogant and vain ;
'Tis thou hast made him great, O pow'r supreme !
To thee he owes his being, life, and light,
With every blessing hast thou placed him here ;
And yet, he dares dispute thy dread decrees,
And doubt the justice of thy blessed will !
Teach me, O Lord ! to know myself and thee,
To use with prudence all thy bounteous gifts,
And justify thy mighty works to man !

The reader, it is hoped, will bear in mind, that neither this, nor any other of his metrical compositions are introduced in proof of poetic genius, which was always a secondary quality in him—but as pictures rather of the thoughts and feelings which occupied his mind at the time ; and for the indulgence of which they were principally, if not solely, written. The

question, that for every practical purpose the same mode of instruction may be equally applicable to all, it is obvious that the effects of the same stimulants must be as various as the dispositions which are submitted to them ; and since the different progress of boys will depend not only upon the measure in which the powers of memory, perception, and attention, are severally possessed by them, but also upon the degree in which they are excited and developed by the means employed, it may and does frequently happen, that a boy of good natural parts will fail of making an adequate advancement among his schoolfellows, merely from the circumstance of these stimulants not being such as would be the most effectual with him.

But if, in addition to this want of sensibility to the ordinary excitements, he should have imbibed an early taste for some particular pursuit, foreign to the immediate business of the school, and should possess withal the means of indulging it, the evil is then greatly aggravated. The powers of his mind become diverted from their appropriate labours to others which are less suited to his age, and of course less profitable to him : and his improvement in the school is impeded not only by the time occupied in his favourite pursuits at the expense of his allotted task, but also in proportion as the pleasure he derives from the studies of his own choice indisposes him for those which, besides their having no apparent object, are only associated in his mind with ideas of punishment and privation. For this evil, which, when it has once begun, every succeeding day renders more inveterate, a large school affords no prospect of relief ; for however accessible a boy's mind may be to some of his schoolfellows, it is generally closed to the master, who, having no clue to the cause of his failure, would be at a loss to administer the proper remedy, even if the choice were ready to his hand.

Such, we apprehend, was the case with Edward Clarke ; for, while he had justly enough the character with his master of being an idle boy, while he was notorious with his schoolfellows not only for the neglect of his own exercises, but also for the ingenious and good-natured tricks which he played to interrupt the labour of others, he had his own studies, which he was delighted to cultivate, and his own quiet hours which he contrived to set aside for them. It is communicated to us, upon the best authority, that he was in the habit of saving his pocket-money to buy candles, and that, after his schoolfellows were asleep, and all the house at rest, he would settle himself in bed comfortably for reading, and occupy his mind with some favourite book : and that, one night in particular, having pursued his studies longer than usual, and sleep having crept upon him un-

awares, he was only prevented from being burnt in bed by the seasonable arrival of the usher, who happily came in at the very moment when the bed-clothes had taken fire.

It cannot be questioned that these eccentric habits have their enjoyments; it may also be true, that in particular cases they lay the seeds of future compensation in the independent character which they give to a man's exertions in his future life, and in the habit which they nourish and support of seeking pleasure from study, distinct altogether from a sense of the advantages to which it leads; a pleasure which no one possessed more amply, or relished more keenly, than he of whom we speak. But lest any one, who may chance to read these pages, should be disposed to imitate his example, or to look upon it with complacency in others, it cannot be too strongly urged, that the experiment is exceedingly perilous, and would rarely be successful, even in the partial view we have mentioned; that the loss arising from it is immediate, decisive, often irremediable, and sometimes nothing less than utter ruin to the boy; while the advantage is distant, obscure, and to the last degree uncertain; capable of being reaped only by a few, and, even with these, dependent upon a fortunate concurrence of circumstances which can rarely be supposed: and, lastly, that Dr. Clarke himself always felt very sensibly, and regretted most forcibly, the disadvantages under which he laboured from his neglect, in his earlier years, of the ordinary school studies.

What those attractive subjects were which thus engrossed the attention of Edward Clarke, to the manifest injury of his classical progress, it is difficult for us to know; but that some of them at least referred to popular experiments in chemistry and electricity, may be clearly inferred from several humorous exhibitions which he used to make in his father's house during the holydays, to the entertainment, and sometimes to the dismay, of the neighbours and servants, who were always called in upon these occasions to witness the wonders of his art. In the pursuit of these experiments, it is remembered that he used, in spite of the remonstrances of the cook, to seize upon tubs, pots, and other utensils from his father's kitchen, which were often seriously damaged in his hands; and that on one occasion he surprised his audience with a thick and nauseous cloud of fuming sulphureous acid, insomuch that, alarmed and half suffocated, they were glad to make their escape in a body as fast as they could. It does not appear, however, that his attachment to these sedentary pursuits prevented him from partaking in the active pleasures and amusements which were suited to his age, and in which his light and compact figure, uniting great agility with considerable strength, was calculated

the day appointed, a vast concourse of people was assembled, both within and around the College ; and the balloon having been brought to its station, the grass-plat within the cloisters, was happily launched by himself, amidst the applause of all ranks and degrees of gowmsmen, who had crowded the roof, as well as the area of the cloisters, and filled the contiguous apartments of the master's lodge. The whole scene, in short, succeeded to his utmost wish ; nor is it easy to forget the delight which flashed from his eye, and the triumphant wave of his cap, when the machine with its little freight (a kitten) having cleared the College battlements, was seen soaring in full security over the towers of the great gate. Its course was followed on horseback by several persons, who had voluntarily undertaken to recover it ; and all went home delighted with an exhibition, upon which nobody would have ventured, in such a place, but himself. While none were found to lament the unseasonable waste of so much ingenuity and industry, or to express their surprise that to the pleasure of this passing triumph he should have sacrificed the whole of an important term, in which most of his contemporaries were employed in assiduous preparations for their approaching disputations in the schools.

But to gratify and amuse others was ever a source of the greatest satisfaction to himself. In the pursuit of this object, he thought little of any sacrifice he was to make, and still less of any ulterior advantage he might gain ; and though it was important to his enjoyment, that the means employed should be, more or less, of a literary or scientific kind, it was by no means essential that they should gratify his own vanity, or reflect any credit upon himself. As a proof of this, it may be mentioned, that only a few months before this exhibition of the balloon in the University, which seemed calculated to excite an interest among thousands, he bestowed quite as much time and labour in the construction of an orrery, for the sole purpose of delivering a course of lectures on astronomy in his mother's house, to a single auditor ; and that one, his sister.

This state of things continued till he arrived at the end of the third year of his residence in College, when an event occurred which left a strong impression upon the whole society, and produced for a time a sensible alteration in his habits. It was usual at that period for those who were candidates for honours, instead of forming parties with private tutors, in the retired parts of the island, as at present, to spend their last summer in College, with the hope of giving a closer and more undivided attention to their studies than could be expected in

the midst of their families at home. For this purpose Edward Clarke, with several others, one of whom, a youth of eighteen, a nephew of the master, was reading for a scholarship, remained in College after the Commencement in 1789, when the rest of the society were dismissed. The summer was singularly beautiful; their little party gay and united; and, all superintendence being removed, they were left to pursue their own devices: and these often led them to excursions upon the water, which sometimes extended even as far as Lynn. The last of these, in which two of the junior fellows had joined, proved fatal to the youth already mentioned. He fell overboard at midnight, in passing through Downham bridge, in some manner which no one witnessed or could account for; and, notwithstanding the efforts of one of the party,* who nearly shared his fate in attempting to save him, he was unfortunately drowned. Edward Clarke was spared the pain of witnessing this distressing scene: he had left the party in the morning with another friend to return to College; but before they had well reached home, news of the disaster overtook them, and filled them with consternation. The body having been found that night, was brought to Jesus College, and interred in the ante-chapel, close to the spot which lately received the remains of Dr. Clarke.

It was at the close of the latter mournful ceremony, when chance had placed the author of this Memoir on the very stone which covered the remains of their common friend, that the grief they had shared together over his untimely fate frequently occurred to his recollection; and it was difficult not to remark how strongly the ready flow of youthful sorrow remembered upon that occasion, contrasted with the manly tears which were wrung from so many time-worn faces then around the grave of Dr. Clarke, when all that remained on earth of so much genius and benevolence, was about to be committed to the dust.

Thus the summer, which had opened upon the party with so much gayety, closed in thoughtfulness and gloom. There was not a single member of the College, from the master to the servants, who did not feel and lament the loss; for besides the suddenness of the calamity, which had thus hurried into eternity a youth just now moving before their sight in the very bloom of youth and health, there was something particularly amiable and attractive in his character, which had rendered

* The Rev. Edward Otter, Rector of Botthall, Northumberland.

him the idol of his companions, and an object of affection to all with whom he conversed. But no one grieved for him more sincerely than Edward Clarke, for there was no one to whom he was more attached; the effect, however, of this sorrow upon his mind was altogether salutary. Books were an obvious refuge, and to them he had recourse; it was the first occasion on which his friends had witnessed in him any thing like a continued and persevering attention to any regular object of pursuit. It seemed as if the saddened tone of his spirits had reconciled him at once to those severer studies, which he had before neglected or disliked, but which the approaching examination must have contributed to force upon his attention; and the consequence was, that with the increased energies arising from these stimulants, aided by the seasonable assistance of the same fellow of the College, to whom allusion has already been made, he was placed at the examination for Degrees as the third Junior Optime; an honour of no distinction, and rarely leading to any academical advantage, but, in his case, of considerable importance; because, to those of his friends among the fellows, who from kindness and regard were disposed to favour his pretensions to a fellowship, it afforded afterward an ostensible reason for supporting his election. In this respect, therefore, the assistance, which has been alluded to, may be thought valuable; but it is only mentioned here for the purpose of bringing into notice a little monument of that extraordinary sensibility to kindness, for which Mr. Clarke was ever so remarkable, viz. a manuscript of mechanics, found among his papers at his death, written by himself in his fairest character, and dedicated to the person who had assisted him, as a token of gratitude for the important service rendered him upon that occasion.

In this irregular and careless manner, undistinguished as an academic in his own College, and altogether unknown as such to the University at large, was formed and educated almost to the age of twenty-one, a man, who in his maturer years was numbered both at home and abroad among the most celebrated of its members; who in various ways contributed not less to its embellishment, than to its reputation; who was honoured and distinguished by it while living, and followed by its regrets when dead. It is an opinion stated in the posthumous work of one, whose own training was not very regular (Mr. Gibbon,) that every man receives two educations; the first from others, the second from himself, and that the last is by far the most important of the two. In these sentiments most persons will be disposed readily to acquiesce, and, farther, to

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be of opinion, that men are wont to be much more defective in the latter than in the former ; in that which they owe to themselves, than in that which is due to them from others. But as the harmony and solidity of a building can only be secured by a strict attention to every part of the structure, which can then and then only be considered as complete, when nothing can be withdrawn or altered without a striking injury to the whole ; so also in education, if any part whatever be either omitted or misplaced, there will always be some defect or obliquity remaining, which injures the whole effect. Such was the case with Dr. Clarke. It was his misfortune that his education was almost entirely his own, the result of accident rather than of system, and only begun in earnest at that period of life when most others with equal inconsistency conceive that they have finished theirs. The precious years of boyhood and of youth, which are usually dedicated to the acquisition of fundamental truths, and to the establishment of order and method in the mind, were by him wasted in unseasonable pursuits ; and though it may be difficult to conjecture what might have been the effect of a different training upon such a mind, yet certain it is, that the defects most remarkable in his character were precisely those which might be computed from such a cause, viz. a want of due balance and proportion among the different faculties of his mind, some having been cultivated at the expense of others, and, by a strange but natural perversity, those having received the most encouragement, which required the least ; and a defective knowledge of principles—an error afterward singularly aggravated by the analytical process he usually adopted in all his acquisitions both in language and science, joined to the circumstance of his being thrown into the world, and constituted a guide to others, at too early a period.

From these defects arose most of the disadvantages which affected the success and happiness of his life. For many years they threw an air of unsteadiness over the whole circle of his pursuits ; and, what is worse, they were the cause, that the very finest of his qualities, his imagination and feeling, which were always on the side of genius and humanity, sometimes served to no other purpose than to lead him astray, inducing strong, but rapid and partial views of things, and occasionally rash and erroneous conclusions. To these, it may be attributed, that he had many a weary footpath in science to retrace, and many an irremediable error in life to regret ; for, although the most candid man alive, he was also among the most hasty ; and had often advanced too far in the false, but alluring light

of his own eyes, before the beams of truth broke in upon him from another quarter. Nor was it till the latter end of his life, when incessant labour had enabled him to go more nearly to the bottom of things, and the duties of his station had induced a greater steadiness in his pursuits, that these original errors of his education had any prospect of a remedy. But had this been otherwise,—had the distinguished qualifications which he afterwards displayed, his fine genius and imagination, his extraordinary memory, his singular power of patient labour and attention, his ardent love of knowledge, and, above all, his lofty spirit and enthusiasm, in which he was surpassed by none,—had these been employed upon a better foundation, and directed by a better judgment; and had the strength of his constitution supported to a more advanced period the exertions of his mind; it may be presumed that they would have borne him, not only to a much greater height of eminence, than he actually attained; but, unless the partiality of a friend deceive him, would have given him a name and a place in the estimation of posterity, inferior to few of whom the present age can boast.

He had now taken his Degree, and it was necessary for him to choose a profession; or, at least, to consider seriously about the means of his advancement and support. And certainly, at this moment, to any common observer, and particularly to one, who, like his historian, had been accustomed to measure every man's expectations in life by that standard upon which academical honours and rewards had stamped their approbation, his case appeared very difficult, if not almost hopeless. For the church, which seemed to be his obvious and hereditary profession, he had, at that time, a strong distaste; and, although the qualifications expected for holy orders were by no means so comprehensive as those so properly required by the bishops of the present day; yet, for the little which was required, he had made no preparation. Nor was his age sufficient, had he been ever so well prepared. On the other hand, even if a different profession had occurred to him as more agreeable to his taste, or more suitable to his talents, he was entirely without the means of pursuing it, being already embarrassed with debts, necessarily incurred in his previous education, and with fewer actual resources, than those with which he set out in College. But whatever might have been the apprehensions of others, the buoyancy of youth and his own spirit never failed him; and it fortunately happened that the only path in life which seemed open to his pretensions, and capable of affording him support, was precisely that which was

the most likely to be productive of improvement and excitement to himself. Nor was it long before an opportunity offered of engaging in it. Dr. Beadon, who had been lately promoted to the Bishopric of Gloucester, had in consequence vacated the Mastership of Jesus College, and removed from Cambridge; but he still kept a watchful eye on the family of his friend, and, more particularly, over the young Edward, who had been brought up under his care, and in various ways had recommended himself to his regard; and within a few months after Mr. Clarke had taken his degree, he mentioned him to the Duke of Dorset, as a proper person to superintend the education of his nephew, the Honourable Henry Tufton, who had been just taken from Westminster School, and was eventually destined for the army. The situation proposed to him was neither flattering to his talents, nor very promising in point of comfort or emolument; but it was such as, under his circumstances, he could not refuse; and, indeed, there is reason to believe that it was a subject of congratulation both to his family and himself.

In consequence of this engagement he went, before he was of age, to join his pupil at Hothfield, in the month of April, 1790, and entered cheerfully and earnestly upon a task, which, to most men, would have been very difficult, and to many altogether impracticable. Mr. Tufton was at that time a youth about sixteen years of age, of a hardy and manly spirit, and of an athletic form, naturally somewhat reserved, and in consequence of a strong distaste conceived at school, averse at that time from tutors of every kind. The place intended for his residence with his pupil was a large house belonging to Lord Thanet, inhabited at that time only by one or two servants, situated in a wild and secluded part of the county of Kent, and cut off as well by distance as bad roads from all cheerful and improving society; a residence suitable enough to a nobleman with a large establishment, and a wide circle of friends; but the last place one would have thought to improve and polish a young man of family just entering into active life. In speaking of this situation afterward to his mother, Mr. Clarke himself designates it, as "one of the most dreary and most complete solitudes any wilderness or desert in Europe can boast of." Notwithstanding these disadvantages the work went on with great spirit and success, and there were several circumstances which rendered the connexion infinitely more pleasing to both the parties, than a first sight would have given reason to expect. In the character of the pupil, there was a manliness and honesty, which were par-

ticularly agreeable to the taste of the instructor ; and his real warmth of heart, which was not evident on a first acquaintance, appeared more agreeable perhaps to Mr. Clarke, because it came upon him by surprise. On the other hand, it was morally impossible for any reserve, however strong by nature or confirmed by habit, to stand long against the vivacity and good nature of the tutor when exerted to overcome it. Their first interview seems to have made a strong impression in his favour : and, before he had been a month at Hothfield, he had gained the confidence and secured the attention of his pupil. To the friend who visited them soon after this period, it was matter of interest and curiosity to observe the influence he had acquired over a mind so differently constituted from his own ; nor was it less curious to remark the ingenuity with which he had contrived to relieve the solitude of the place, and to people it with a thousand little agreeable resources, which would have occurred to no one but himself. In the course of this engagement, which seems at first only to have been intended for nine months, Mr. Clarke was constantly in correspondence with the Duke of Dorset, respecting the character and progress of his nephew ; and sometimes they were both invited to spend a few days at Knowle, that the duke might be a better judge of the improvement which had been made in his charge, and of the course which it might be proper to pursue with him in future. These occasions, which were now and then prolonged beyond the term appointed, could not possibly pass away without great advantage to Mr. Clarke ; they were the means of introducing him to a polished and lettered society, at that time, frequently assembled at Knowle, from which no one knew better how to profit than himself ; and, what was perhaps of more importance, they gave him access to an admirable collection of books connected with those favourite studies, which he had before been compelled to cultivate under great disadvantages. On the other hand, his own talent and vivacity, joined to his extreme readiness and good nature, could not fail of raising his character in the opinion of the duke himself, who has always been described as an accomplished man ; and the result of all this was such as might have been expected, that at the duke's particular request, the connexion with his nephew was prolonged another year. Accordingly, they took up their residence together at Hothfield for the winter ; and in the spring of 1791, as some compensation for the long and dreary season spent in that solitude, and with a view to the farther improve-

ment and information of Mr. Tufton, they were permitted to make the tour of Great Britain together.

This was undoubtedly a most important epoch in Mr. Clarke's life ; it was the first opportunity he had had of gratifying a passion which was always uppermost in his mind, but which he had hitherto been unable to indulge ; and it necessarily threw in his way many opportunities of acquiring information in those branches of natural history, for which he had early shown a decided taste, and to which he afterward owed so much of his celebrity. It gave him also such a portion of knowledge and experience in the details of travelling, as seemed to qualify him for the commencement of greater undertakings hereafter. But it was still more important in another point of view ; it was the cause of his first appearance before the public in the character of an author ; he kept a journal of his tour, and at the request of some of his young friends, upon his return, was induced to publish it. The work is now exceedingly scarce, the greater part of the copies having been destroyed or lost within a short period after its publication. Indeed, Mr. Clarke himself soon learnt to have a lower opinion of its merits than others perhaps more considerate, would be disposed to entertain, when the age and circumstances of the author are taken into the account. Within a year after its appearance, he expressed his regret that he had been led to publish it so hastily ; and to such a length was this feeling carried in the latter part of his life, that the book was studiously kept from the sight, and as much as possible from the knowledge, of his friends ; nor did he ever speak of it to any one, although, to the last, allusions to certain ridiculous parts of it were frequently conveyed in broken hints to a particular friend, which nobody but themselves understood. Considered as a whole, the work must be judged unworthy of the high reputation he afterward attained. It was got up in a great hurry, without even the advantage of having the sheets corrected by himself, and bears about it strong internal evidence both of youth and haste : it abounds with trifling incidents of life, and florid descriptions of scenery, as coming from one to whom the varieties of human character, and the majesty of nature, were alike fresh and new ; it betrays occasionally considerable credulity, some proofs of a crude and unformed taste, and of a rash judgment : but, notwithstanding these defects, it has merit enough, and of a kind to show that it is the production of no common mind. It is throughout natural, eloquent, characteristic, full of youthful ardour and spirit, and strongly indicative of feelings, which do honour to the good-

ness and humanity of his heart. It contains, too, some happy as well as faithful descriptions, and is not entirely without humour.

To gratify the curiosity of the reader, and to show, what is always interesting, the first impressions of fine scenery, and the first effects of new habits and manners upon an observing and enthusiastic mind, a few passages will be extracted from this work.

It should be premised that the travellers left London on the 4th of June, and proceeding first to Portsmouth and the Isle of Wight, traversed the whole of the south of England to the Land's End. Returning thence, by the north of Devon, they visited Bath and Bristol, and crossing the Severn at the New Ferry, made the usual tour of South and North Wales. They then crossed the channel to Dublin. From Dublin they returned to Holyhead after a few days' stay, and then passing by Conway to Chester, entered the midland counties of England; and having visited Manchester, Sheffield, Birmingham, Lichfield, and Oxford, arrived in London in the latter end of August.

The first extract submitted to the reader, is an account of Keeve's Hole, in the Isle of Portland: a very interesting natural cavern, difficult of access, and rarely visited by travellers.

"By stepping from one fragment to the other, I contrived to descend below the roof of the cavern. Here, seated upon one of the most prominent points of the rock, I had an opportunity of contemplating a spectacle so truly awful and sublime, as to beggar every power of description. Impelled by the same motives of curiosity, many may have ventured to explore it, as I did; but I am confident the same reflection arose from the view of it, that it is one among the stupendous features of nature, which can only be conceived by those who contemplate its beauties on the spot: and in all attempts to depicture it, whether by the pencil, or the pen, however lively the delineation, it must fall short of the original. And this is one of the first emotions which a traveller feels, in beholding the magnificence of nature—a consciousness of the impossibility of retaining, or relating, the impressions it affords; inasmuch as it is beyond the power of mechanism, to give to inanimate matter the glow and energy of life. I found it to be indeed a cavern, not as our guide had described it, proceeding through the whole island, but such as amply repaid me for my trouble. Winding from its entrance into the heart of the solid stone, it forms so large a cavity, that ships, in stress of weather, have put into it for shelter. From the pe-

cular advantage of my situation, I beheld at the same time the whole of this wonderful place, from the prodigious arches which form its mouth, unto its utmost extent behind. The sea gushed in with a force that threatened to overwhelm me in its foam, and subsiding among the rocks, roared in rough surges below. Vast masses of stone had, from time to time, fallen among the huge pillars that supported the roof, and by the ponderous chasms which every where appeared, many more seemed to tremble, and menace a terrible fall. I looked around me with astonishment, and felt what an insignificant little mite I was, creeping about among the fearful and wonderful works of God. I could have remained for hours in my subterranean abode. A reverie, which would have continued unbroken until put to flight by the shades of the evening, succeeded to the astonishment I was at first thrown into. But in the world above I had companions of a more restless nature, who soon roused me with their bawling, and by a shout of impatience snapped the thread of my meditations."

The following is his description of the Mount, in Mount's Bay, in Cornwall, belonging to Sir John St. Aubyn, Bart.

"We beheld a mountain in the middle of a beautiful bay, spreading its broad base upon the glassy waves, and extending its proud summit high above the waters, with an air of uncommon dignity. It shoots up abruptly from the sea, and terminating in a point, presents an object of uncommon grandeur. Its rugged sides are broken with rocks and precipices, displaying a most beautiful contrast to that pleasant prospect of fields and villages which surround and enclose the bay. As the sea ebbs and flows it is alternately either an island or a peninsula. It is called St. Michael's Mount. At the top of it is a building resembling a church, the seat of Sir John St. Aubyn. The most skilful architect could scarcely plan a structure which would better adorn the mountain, or be more adapted to the shape of the hill on which it stands. The tower of the church is almost in the middle of the whole building, and it rises from the centre of the mountain's base, terminating the whole. The church bells, and parapet walls, spread themselves round the tower, so as to cover the area or summit of the hill. Enlarging itself gradually from the building downwards, the hill swells into a base of a mile in circumference. It stands near the centre of a delightful piece of water, and making the most remarkable figure in any part of its circuit, gives it the name of Mount's Bay. We visited the exalted residence of the Baronet before mentioned, who may truly be said to dwell—'in the moon's neighbourhood.'—It

is remarkable on no other account but its stupendous situation, which is so very high, that from the tower we could see across the channel. Formerly it was used as a garrison, and fortified accordingly. Charles the First confined the Duke of Hamilton in this very place, who was afterward released by the parliament forces. In earlier periods a priory of Benedictine monks stood here, founded by Edward the Confessor, and until the reign of Richard Cœur de Lion it served for the purposes of religion only."

On arriving at the Land's End, he thus expresses himself.

"From Penzance we went to the Land's End, and stood upon the extreme point of that part of this island, which, at the distance of three hundred miles from the metropolis, extends south-west into the sea. From this spot you command at once the entrance of the great channel. It is an astonishing sight. Immense rocks lie scattered up and down, piled upon each other, as if the fables of old had been realized, and the giants of Etna had burst from their sepulchres to heap these ponderous masses, in horrible confusion, against the pillars of heaven.—The sea, in vehement fury, dashes its rough surges against their craggy sides, and disclosing the black visages of a thousand breakers, that frowned half-concealed among the waves, betrayed the terrors of a place which had proved so often fatal to the shipwrecked mariner. The Islands of Scilly appeared at a distance through the thick gloom that enveloped them. The sea howl screamed among the cliffs. The clouds were gathering up apace, and the wind, as it broke through the chasms of the rocks, in short convulsive blasts, predicted a terrible storm. It began already to howl, and the vast surface of the ocean swelled into a foam. I know not a spectacle more awful than a storm at sea: but if I wished to place a spectator in a spot, from which such a scene would appear more terribly sublime than usual, it should be upon a stupendous promontory which presents itself in this remote corner of our island."

The narrative which follows is strictly characteristic of him at this period of his life, exhibiting his vehement and rapid flow of diction—his peculiar benevolence of heart—his ready confidence and strong sympathy in stories of distress—and the warmth and quickness of his feelings.

"We had proceeded but a few paces from the door (of an inn at Haverford West,) when I discerned on the opposite side of the way something like a place of confinement; but so barricaded, and so miserable in its aspect, that I conceived it to be a receptacle for wild beasts. Upon farther in-

spection, I discovered through a small window, double grated, a man in a melancholy attitude, with a book in his hand. He was clothed in the tattered remnants of a naval uniform, and as we obstructed the light which glimmered through the grate upon the pages of his book, he started, and saw us. We were going to withdraw, when finding how much we were struck with his appearance, he addressed us. Gentlemen, (said he,) you see here an unfortunate officer of the navy, who, for a trifling debt, has suffered five months' imprisonment in this abominable dungeon: without any support but from the benevolence of strangers and the uncertain charity of a few among the inhabitants, denied even water to gratify his thirst, unless he can raise a halfpenny to pay for it, and condemned to linger here without a prospect of release.'

"We asked him by what means he had incurred the debt, and how he became unable to discharge it.

"He said he was a Lieutenant in the navy, and formerly belonged to a King's ship, called the Trimmer. That he had been stationed with the rest of his crew at Haverford. It happened one day that he was out on a visit, when his comrades hearing of some smugglers went in pursuit of them, and left him on shore. During their absence, he had lived, he said, as other gentlemen do in the neighbourhood. He had visited them, hunted with them, and partook of the amusements of the place. When he wished to leave Haverford, he had written to his agent at Liverpool for cash. The people of the house where he lodged knew this, and when the answer returned, with a spirit of parsimony hardly to be conceived, and in violation of every honest and honourable principle, intercepted and broke it open. It was then discovered that his agent had failed, and could remit him only five guineas, which were enclosed in the letter. This sum the harpies instantly seized, and threw their unfortunate victim into the dungeon where we found him, and where he had languished ever since.

"I felt my blood chill with horror at his narrative, and interrupting him, 'In God's name, Sir,' said I, "have you no friends, is there not one to whom I can write in your behalf?"

"My name," said he, 'is G—th. I was one of those who accompanied Captain Cook in his circumnavigations. I lived but by my profession, and have done so from my infancy; I have no relations, and hardly a single friend. There may be those who would hasten to extricate me, if they knew my situation, but I wish to keep them ignorant of it, nor can I bear to apply to them.'

"Finding all our entreaties ineffectual, in endeavouring to serve him by writing to those who knew him, we begged he would accept of our assistance in a different way, and leaving a small donation with him, we went to make other inquiries among the inhabitants. They all knew him to be a gentleman of good character, and great ability in his profession; every information we received tended to confirm his own assertions; but this only increased our astonishment, to find that in so large a town as Haverford West, there could not be found liberality enough among the people, to save a gentleman from prison for a paltry tavern-bill.

"Once we heard he had made his escape. A deserter was thrown into the same dungeon with him, and this fellow effected the means of his deliverance. They had not quitted their prison above a quarter of an hour, before their flight was discovered, and the jailer rang the fire-bell to alarm the town. Mr. G—th and the deserter were then in one of the fields near the town. As soon as they heard the fire-bell Mr. G—th fainted. Overcome with weakness, from confinement, and the apprehension of being retaken, he fell at the feet of his companion. Upon this, the deserter dragged him into a ditch, and covering themselves with some new hay that was in the field, they remained concealed until the morning, when they both endeavoured to escape. The deserter being the strongest, soon got out of the reach of his pursuers; but Mr. G—th, unacquainted with the country, and unable, from excessive weakness, to proceed, was retaken by the sheriff's officers about twenty miles from the town. As soon as he perceived them, he made a desperate attempt upon his own life, and before they could seize him, stabbed himself in the side. The wound proved not mortal, and he recovered to undergo, what he dreaded much more, the horrors of his prison.

"We returned to him again, and apologizing for the meanness of our former offer, and begged we might improve it. He seemed overcome with the thoughts of having found a human being who could feel for his situation. Upon farther conversation, I found he was well acquainted with a fellow collegian of mine, and with his whole family. He said he was certain of having the command of a vessel if he could be released; that he had frequently offered to compromise with the woman who imprisoned him, and would give her cent. per cent. for her money until it was paid, if she would enable him to return to his profession. The inexorable d—l, for I cannot now think of a worse name for her, had refused all his requests, and would not pay the least attention to any applica-

tion that was made for his release. The original debt did not exceed twenty pounds, but his prosecutrix, by her villanous machinations, by rascally attorneys, and the expenses of his imprisonment, had really doubled it. It was not until eleven at night that I gave over my inquiries with respect to Mr. G—th; and among the variety of questions we put to different people, no one gave him an ill word, but all were unanimous in encomiums upon him. Thus, in a hostile country, surrounded with persecutors, imprisoned, and in debt, he seemed without an enemy. Some despaired of his release, others were in hopes he would receive his liberty at the assizes, as a society of gentlemen had promised to subscribe for that purpose.

“YE GENTLEMEN OF HAVERFORD! could ye not find one spark of pity or generosity resident among ye? A stranger came and fell into misfortunes, and was there not one Samaritan, who would visit the prison of the wretched, and soften the iron fetters of his bondage? Yes, one there was, and more than one, and happy must they feel who have hitherto supported him in his captivity. But YE ALDERMEN OF HAVERFORD! for it is to you I dedicate these effusions of my soul—and if ever your eyes glance upon these pages of my work, may the traces of my pen sink deep into your hearts, and penetrating the iron folds around them, force out a sentiment of contrition and remorse. What! could ye not spare the exuberance of one feast from your gorgeous appetites, to succour a bulwark of your country—a son of Neptune? Could you not spare the price of one dinner, to relieve a fellow-creature in distress? Oh shame! shame! shame upon you, YE ALDERMEN OF HAVERFORD!!!

“Peace to the ashes of the benevolent HOWARD! what a scope for his philanthropy would have been offered, had he visited the dungeon at Haverford. He is gone to receive the reward of his virtues, but his name shall be immortal.

The spirits of the good, who bend from high,
Wide o'er these earthly scenes, their partial eye;
When first array'd in virtue's purest robe,
They saw her Howard traversing the globe;
Saw round his brows her sun like glory blaze
In arrowing circles of unwearied rays;
Mistook a mortal for an angel guest,
And ask'd what seraph foot the earth imprest.

Loves of the Plants. Canto II. p. 86.

“I never felt more disposed to quit any place than Haverford. The thoughts of Mr. G—th's sufferings, added to the filthiness of our inn, and the unwelcome deportment of every yawning countenance we met upon our return to it, so preju-

diced us against the whole town that we ordered horses to be in readiness before sunrise the next morning.

"Creeping into my miserable sty, for I could not be guilty of so gross a compliment as to call it a bed-room, I endeavoured to compose myself to sleep. The sheets stuck to my back with dampness, and not having been changed since the last assizes, contained such a quantity of sand, which the feet of my predecessors had imported from the floor, that I was determined to sit up the whole night. The thoughts of Mr. G—th in his horrid dungeon, but a few yards from me, seemed to reproach me for my discontent, and feeling thankful that I was out of their clutches, I fell asleep.

"When we came to our chaise in the morning, we found four horses affixed to it, whereas we had ordered but two, and an impudent scoundrel at the door insisting upon our using them. We had no alternative, we must either obey his orders, or remain at Haverford, and God knows with what alacrity I chose the lesser evil to avoid the greater. Any inconvenience was better than staying *with Pharaoh and all his host*, so away we drove, execrating the whole tribe, and fearful lest the well-known words, with which Dr. Johnson addressed a crow in the Highlands, should be made applicable to us—*What, have wings, and stay here?*"

The following is his description of a blind female Harper at Aberystwyth, and of the first effect of the native music of the country upon his feelings.

"Here we had, for the first time since we entered Wales, the pleasure of hearing the music of the country, in its pure state, from a poor blind female harper. She could speak no English, nor play any English tunes, except *Captain Mackintosh* and the *White Cockade*. There was so much native simplicity in her appearance, and the features of sorrow were so visible in her countenance, that no one could behold her unmoved. She was led in by the waiter, dressed after the style of her countrywomen, in a coarse woollen gown, and a hat of black beaver. She had seated herself in a corner of the room, and by an involuntary motion, I drew my chair close to hers. A predilection for Welsh music would alone have disposed me to listen to the harp; but our blind minstrel, with her untaught harmony, called forth all our admiration, and attention became the tribute of pity. When she touched the strings, she displayed all the execution and taste of the most refined master. Her mode of fingering was graceful, light, and elegant; her cadences inexpressibly sweet. We had never before heard such tones from the harp; she ran through all the

mazes of Welsh harmony, and delighted us with the songs of the bards of old. She seemed to celebrate the days of her forefathers, and fancy led me to interpret the tenor of her melody. It sang the fall of Llewellyn, and broke forth in a rapid tumultuous movement, expressive of the battles he had fought, and the laurels he had won.

"All at once she changed the strain; the movement became slow, soft, and melancholy—it was a dirge for the memory of the slaughtered bards, the departed poets of other times. An air was introduced after a momentary pause, which vibrated upon our very heartstrings. With trembling hands, and in a tone of peculiar melody, she told us the sad tale of her own distress. She sang the blessings of light, and portrayed in cadences the sorrows of the blind.

"Without any support but her harp, deprived of her sight, friendless and poor, she had wandered from place to place, depending entirely upon the charity of strangers. We were told that she contrived to obtain a decent livelihood by her talents for music; nor did we wonder at it, for who can refuse pity to the sufferings of humanity, when the voice of melody breaks forth in its behalf?"

He thus expresses himself on the fall of the Monach:

"We beheld the river Monach in a bold convulsive cataract between the mountains, foaming with clamorous fury through a chasm of the solid rock, and rushing down the steep abrupt of a prodigious precipice, roar in a white surf at our feet, and lose itself in a vast basin below. Enveloped by an awful display of every thing that can add majesty and grandeur to the features of nature, the spectator is lost in the contemplation of this wild assemblage of mountains, valleys, hills, rocks, woods, and water.

*Præsentiorum et conspicimus deum
Per invias rupes, fera per juga,
Clivosque præruptos, sonantes
Inter aquas, memorumque noctem.*

GRAY.

"After having feasted our eyes with the view of this headlong torrent, we ascended by our guide's direction, and were introduced to a similar scene above it. From this second part we ascended to a third, and so on to a fourth and a fifth: for this fall of the Monach is so much interrupted and broken, that by a near inspection, as you ascend from the bottom, you are shown five separate cascades; which, when you retire to a proper distance, at a particular point of view, appear all united into one stupendous cataract. We were conducted to

this spot, which is on an eminence opposite the fall, and from whence the effect of this cascade is superb. The bare mention of a river, precipitated from a height of four hundred feet, conveys an idea of something great, of something unusually magnificent. But when to this is added the peculiar wildness and gigantic features of the scenery which surrounds the fall of the Monach, no description whatever can do it justice. Soon after its descent, it runs into the Rhyddol, which river also displays a beautiful cascade, before its union with the Monach. Several brooks and smaller streams are seen falling from the tops of the high mountains on all sides, and losing themselves in the valley below. Thus we seemed surrounded by waterfalls, many of which deserved our notice, had it not been for the fall of the Monach, which engrossed our whole attention."

The last extract from this work shall be his farewell address to the reader. It is interesting for the view which he takes of his own production, as well as for the prophetic hope it holds out of better efforts in the same career, when the inexperience and the prejudices of youth should be removed. It was written when he was setting off on his tour to Italy.

"To him, therefore, who had been induced from motives of candour or curiosity to mark the progress and termination of my rambles, I make my grateful acknowledgments. Courteous or inquisitive reader! if, in the perusal of these pages thy brow has been sullied with anger or contracted by contempt, let me entreat thee to obliterate the remembrance of it! I have endeavoured to portray with accuracy a variety of scenes in no small extent of territory; I have pointed out every object which I deemed worthy of thy notice: I have considered thee as the companion of my travels, and have given thee the fruits of my labours without the fatigue or expense of acquiring them.

"It would be impertinent to apologize for present deficiency on a promise of future improvement—else, haply, when the hand of time shall remove the curtain of prejudice, and check the sallies of inexperience, I may hope to throw aside my anonymous pen and assume a more respectable appearance. It is with this view I leave my present work to its fate, and go in search of materials for a more important superstructure. I hasten among the wider regions of continental domain; to see peace expel discord, and to witness the downfall of anarchy; to behold the armies of nations combined in restoring serenity to a distracted people: to behold the melancholy condition of a country, where faction, drunk with the blood of multitudes,

has fantastically arrayed herself in the garb of liberty, and like the arrogant bird, who envied the meekness and beauty of the dove, vainly endeavours by assuming a borrowed plumage to hide her native deformity."

In a letter to a friend, written while this work was in the press, Mr. Clarke thus expresses himself, with all the ardour of a youthful author:—

"I have a work in the press. It is the tour we made. My friends encourage me to hope for success. Two booksellers have it between them. It will make two volumes octavo, with plates in aquatinta. A few impressions will be struck off in quarto. The first edition consists of 1000 copies only; if these are sold off, the disposal of the second edition remains with me. It will cost them 140*l.*: so, I gave them the first edition, and they pay all expenses."

CHAPTER III.

His engagement to travel with Lord Berwick—Tour to Italy—His employments and acquirements there—Residence at Naples—Projected excursion to Egypt and Greece—Hasty journey to England and back—Departure from Naples—Return to England—Conclusion of the Tour—Letters on Foreign Travel.

In the autumn of this year, 1791, and shortly after the close of his journey, we find him balancing between the prospect of another winter at Hothfield with his pupil, and the alternative of entering into holy orders with an immediate prospect of the curacy of Uckfield, which had been served by his elder brother, but was at this time offered to him; and, certainly, if any proposal of the kind could have tempted him, it would have been the curacy of Uckfield, where all that was most dear to him in life was assembled, and where he was always anxious to take up his abode. But, as he was not at this time disposed to embrace the profession of the church, he did not hesitate long; and the result of his deliberation, with the reasons upon which it was founded, will be best learned from one of his letters to his friend and biographer, dated October, 1791.

"—Your letter came most welcome to me; I had just been framing a remonstrance against your long silence. It was not my wish to leave Mr. Tufton, but all my friends cried out against me, and said it would be madness to resign a certain emolument, for the precarious consequences of another

six months' interment at Hothfield. I wrote to the bishop of Gloucester, and asked his advice : he begged to stand neuter, and gave no opinion upon such a nice point. I then sent off my letters to the Duke of Dorset ; I represented the whole case, offered to take Mr. Tufston into our family, which must be better for him than being at Hothfield, and ended with saying, if he did not approve of my proposal, my services, such as they were, were entirely at his disposal. I was, I said, bound to him in gratitude for repeated acts of kindness, and was willing if he desired it to discharge myself from every other occupation : and dedicating myself solely to Mr. Tufston's welfare, would go with him to any part of the world, and stay with him for any length of time whatever. You have no idea how much the duke was pleased with my offers. He wrote immediately, requesting of me to continue with his nephew, and said that he was fully sensible of my attention to him, and that my conduct upon all occasions demanded his warmest acknowledgments. I did not hesitate a moment, but swallowing this fine pill, jumped into the mail coach, and reached Uckfield by four o'clock in the morning. There I knocked them all up, adjusted every thing, bade my mother good-bye, travelled all night again to Lord Thanet's, sent the duke my final determination, persuaded Mr. Charles Tufston to accompany us, and here we are again.

“ E. D. C.”

But before this resolution was taken, he had paid a visit to his mother at Uckfield, and there, with his usual overflow of filial kindness, had recounted to her the whole story of his adventures, and spread before her admiring eyes the wonders of art and nature which had been the produce of his tour ; for, it may be observed here, that the specimens of mineralogy which he gathered in this journey, formed the nucleus of that extensive collection, which long afterwards furnished the subjects of his academical lectures at Cambridge. A scene from this visit shall be described in his sister's words. “ The animated gaze,” she says, “ with which he regarded his treasures from the mines of Cornwall, his specimens of copper ore, mundie, &c. &c. &c., covering a whole long dining-table, at the top of which he had placed his delighted mother, and his beloved and invaluable friend and counsellor Mrs. Catherine Courthope, together with every friend and acquaintance that could be met with, in the surrounding precincts ; the long and original droll detail, which he delivered to them, of all his adventures, particularly of his obtaining one worm-

eaten leg, from the many that had been sold of Shakspeare's chair; the woman's loud scream, when he wrenched it from the seat, though unable to refuse the liberal offer; the kick of the husband as he sent her head-over-heels down the cellar stairs, for being such a fool as to part with so large a relic; the anan!! anan!! of the neighbours, may well be remembered, but can never be described."

It will be seen from the extracts of a former letter, that Mr. Tufton's brother accompanied them on their return to Hothfield, after it had been decided that the connexion should be continued through the winter, and this gentleman being about to join Lord Thanet in Paris, had taken Hothfield in his way; and when he left the place in the latter end of October, the two friends eagerly seized the opportunity of passing over with him to Calais. It was the first time Mr. Clarke had set his foot on foreign ground, and how delightful were the sensations he experienced, will appear from the following extract from an amusing letter to his mother:

"CALAIS, October 18, 1791.

"Here we are! Even I in France. Would you believe it? I have found my father's name written with a pen upon the frame of an old looking-glass. The date is almost worn out, but a rude guess makes it to be, December, 1772. I am half dead with sea sickness—twenty-four hours passage from Dover. Just now I sent for Monsieur Dessein, and asked him if he remembered Sterne. He speaks broken English, and I worse French, so you may suppose what an edifying tête-à-tête I have had with him. When I arrived I was half-starved, and seeing a number of waiters crowding round me with '*Que voulez vous, Monsieur?*' I despatched them all for something to eat. They all came back again, '*Et pardonnez moi, Monsieur, que voulez vous?*' Beef! and be hanged to you! said I, out of all patience, and away they flew, saying, '*Mon-Dieu! en vérité, mi lor Anglois!*' Presently in comes a troop of 'em with Dessein, at their head, bringing in tea, but no beef, and an old overgrown hen, by way of cold chicken. Allons! said I, portez le beff! Monsieur Dessein made a low bow, '*Non pas beef, Monsieur! la voila, un petit pullet!*' Un petit Turkey cock! said I; Monsieur Dessein bowed again, I laughed, and got over the style. You will think me mad or drunk, so I'll wind to a close. I am in such spirits, I cannot write sense."

After a few days spent at Calais, they returned to Hothfield, where they spent the winter. In the spring of the ensuing

year, 1792, when Mr. Clarke's protracted engagement with Mr. Tufton was drawing to a close, he began to turn his thoughts seriously towards that home, which had ever been his pride and delight, and which he now considered as likely to furnish under the repose of its peaceful roof, the best means to gratify that literary passion, which began more and more to occupy and interest his mind. Under this impression he wrote to his mother, requesting that the little study might be prepared for him, and that his father's table and high backed chair, objects always dear to his recollection, might be placed in it for his use. Joyfully were these directions received, and promptly and accurately were they executed; nor could any thing exceed the delight of the mother and daughter, at the prospect of receiving permanently for their inmate a son and brother whom they so fondly loved, and in whose conversation and pursuits they took so deep an interest: but for this time they were destined to be disappointed. Having come to London in the spring of 1792, with his pupil, of whom he was about to take his leave, in consequence of the appointment of the latter to a regiment, he renewed his acquaintance with Lord Berwick, who had been of the same year with him in College, and who being now of age, proposed that Mr. Clarke should accompany him in the capacity of a friend to Italy. The offer was too valuable in all respects to be refused; for, however pleasing at first view to all the parties concerned, might have been the thought of his sitting down at Uckfield with his mother and sister, the project was much more calculated to gratify their present feelings than to promote his future advantage. His habits were not duly settled, nor his mind sufficiently stored for the repose he sought (which was in truth only a temporary want,) nor would his circumstances or prospects have admitted of it. But, if all this had been otherwise, the place itself was in no respects calculated for such a scheme. It had neither books nor learned society, nor, in truth, any materials for the furtherance of those pursuits to which his inclinations would have led him. The author of this memoir has visited him several times in this beloved home; and once or twice has seen him apparently fixed there for an indefinite period. On these occasions it has been always observed, that he was delightful to others, and contented and happy within himself, and ever with some object of pursuit, but never studious. A letter to his friend will explain the nature of Lord Berwick's offer, and the reasons assigned for his closing with it.

"LONDON,—1792.

"—Doomed to be a wanderer, I still flutter about, uncertain whether, or not, I shall ever sit down in peace. Every thing is changed—I am *not* going into orders—I am *not* going to be Curate of Uckfield—but I *am* going to be exiled from my country, and wander I know not where. It is now about a fortnight, since Lord Berwick sent to beg I would let him have an hours' conversation with me. The purport of this was, that I would, when I left Tufton, give up all my present prospects, and accompany him in a tour through France, Germany, Switzerland, Italy, Spain, &c. and be with him about two years. He will pay all my expenses. I laid it before the Bishop of Gloucester: he told me to seize the offer, without hesitation. To tell you all the trouble I have had, all the pain it has cost my mother, to be separated from all her children, and a long *et cetera*, would take me several hours. I have consented. You can't wonder at it—you know how I longed all my life to see *furen Parties*, setting aside the advantage of the connexion. I have toiled and fretted, entreated and manoeuvred, till it is now nearly settled that Mr. Tufton goes with us."

Having entered upon his engagement, Mr. Clarke immediately set about preparations for the journey. But as Lord Berwick had business of importance to transact in Shropshire before he could leave England, Mr. Clarke joined him at Attingham in the early part of June, and remained with him for nearly a month. His letters at that time, speak in the highest terms of the magnificence of Lord Berwick's seat, and of the beauty of the country. He visited all that was remarkable in the neighbourhood, accompanied his friend in his excursions to Shrewsbury and other places, in which he was interested; and lived near a fortnight with the mess of the Shropshire militia, in which Lord Berwick had then a company. These were all new scenes to him, and seem to have afforded him considerable pleasure. About the middle of July, 1792, their preparations being all completed, and the correction of his work, now in the press, being intrusted to the kindness of a friend (Mr. now Archdeacon Wrangham,) they set out upon their intended tour. They made Uckfield in their way, for the purpose of indulging Mr. Clarke with an opportunity of taking leave of his family; and after spending two days at that place they proceeded to Dover, and embarked there for Ostend. It is certainly much to be regretted that, of this tour, to which Mr. Clarke is indebted for so many valuable acquisitions to his knowledge, and so essential an improvement of his taste, the accounts which remain to us, are in

some respects less satisfactory than could be wished. They consist of a journal and a few letters. The journal, which begins at Turin, is not continued regularly till after his arrival at Naples; from that time, however, it is sufficiently particular, and has no important breaks or interruptions; and, had the substance of it been prepared and published by himself, soon after his return, as was once intended, before the ground had been occupied by others, and while the incidents and objects he describes were fresh in the recollection of that extensive circle of his countrymen whom his talents and kindness had attached to him in Italy, there could have been no doubt whatever of its favourable reception. But now, when a lapse of thirty years has borne away with them the great majority of the persons connected with these travels, and even to the survivors must have diminished the interest which they would have once inspired; when almost every object he notices has been accurately examined and described by many accomplished travellers since; it would require nothing less than the happiest touches of his own pen to make such a journal attractive throughout to the public of the present day; more especially when it is remembered, that during this period, the process of his improvement was only going on, and that the observations recorded by him must of course be of very different degrees of merit. Under these circumstances it has been thought advisable to make such extracts only from the journal as may appear to possess in themselves any superior interest, or to throw light upon his character or pursuits. With his letters a similar course will be pursued; they are indeed loosely and hastily written, and in no respect to be compared with his later productions of the same kind; but they contain some fair specimens of his talent for description and some nice touches of character; and, at all events, when connected with the journal, they will tell the story of his life much more agreeably than any narrative which could have been framed from them. His best letters of this period, which were written to the Duke of Dorset and the Bishop of Gloucester, are probably no longer in existence.

Italy was the principal object of the travellers; and their plan was to pass into that country by Mount Cenis and Turin. But as it was necessary to avoid the French territory, which was then agitated throughout by the paroxysm of its ferocious revolution, they determined to take the route of the Low Countries to Cologne, and then ascending the Rhine to Schaffhausen, to pass from thence through Switzerland and Geneva, into Piedmont. It will be seen afterwards, that they

were driven from the latter part of this design. Mr. Clarke's first letter to his mother is dated, Sept. 9, 1792, from Spa; it develops the plan of their journey, and affords an amusing specimen of his inexperience as a continental traveller.

Spa, Sept. 9, 1792.

" — We stay here a day or two, and then proceed to Aix la Chapelle, Dusseldorf, and up the banks of the Rhine, through Cologne, Bonn, Coblenz, Mayence, Francfort, &c. &c. to the great fall of the Rhine near Schaffhausen; we then enter Switzerland, and proceed through Berne and Lausanne to Geneva—from Geneva we go to Turin, where we shall remain till we are perfect in the French language, and if possible in the Italian. After we have acquired these, and a few little improvements in fencing, dancing, &c. we set out upon our tour. Lord B says he shall not consider himself as travelling in earnest until he leaves Turin, when, if possible, we shall make a complete tour of Europe. He has sent for a phaeton from London, and is going to purchase four black horses to run in it, which I am to drive. I should now be as happy as any man can be, if I could but diffuse a little joy among the dear friends I left behind. The thoughts of what they may want, and they may feel, throws a cold damp over every comfort I have. Perhaps I may now be laying a foundation for their future welfare; God grant that it may be so, and that no intervening mischief may interrupt the rising prospect before me, and embitter the time to come. Let me know the success of my little work, and what the reviewers say of it, whether good or bad, word for word."

The next letter is dated, Turin, Oct. 15th, 1792.

" — It is not easy to express the satisfaction we feel in being safely lodged within the walls of this city, after all the dangers and difficulties we have passed. Every species of obstacle intervened to prevent our progress—armies met before us—rivers and lakes swelled to overwhelm us—mountains rose before us—deserts bewildered us—nay, even our own servants, from motives as yet unknown, formed projects to retard us—yet here we at last safely moored in the capital of the dominions of his majesty the King of Sardinia.

"I think my last letter to you was from Spa; since that time we have seen much and done more. We proceeded up the banks of the Rhine through Cologne, Coblenz, and Francfort, peaceably to Heidelberg. At Francfort we were present at the largest fair in all Europe, but it is not so much worth seeing as the annual fairs at Cambridge. At Heidel-

burg we had the old story of the great tun and Charlemagne, and were highly delighted with the old lacquey Antoine, who prevailed on me to scrawl some nonsense in his album. As we approached the confines of France, the road all the way was crowded with soldiers ; from Friburg to Basle, the Prince de Condé's armies filled every village and every town. It was then expected that they would cross the Rhine in three days ; baggage wagons and flat-bottomed boats filled all the avenues of the turnpike roads ; and horses became so scarce, that the poor farmer's oxen were pressed to serve the carriages that came post. When we were at Basle the inhabitants were hourly in expectation of being besieged ; all the women left the town, the French emigrants lay within three miles on one side, the patriot camp within two miles on the other, I went to see both, and very near got killed in a scuffle among the democrats—but this is too long to tell now. When we entered Switzerland, all the country was rising under arms and flocking to defend Basle ; before we got to Bonn, we heard that the French had taken Chamberry, that the passage over Mount Cenis was shut, and that the patriots were at the gates of Geneva : what to do we did not know : but resolved to go to Lucerne, cross the lake there, and afterward make an attempt to cross that tremendous ridge of mountains which divide Italy from Switzerland. A volume would not tell you our adventures and hair-breadth scapes in performing this exploit, Our carriages were drawn by oxen and peasants over high mountains of snow, where no European had ever dreamed of meeting a carriage before, among precipices, rocks, torrents, and cataracts.* The mountaineers beheld us with astonishment, the children ran away from us, and the men could not be kept from the wheels, insomuch that they broke the blinds of Mr. Tufton's carriage in their eagerness to see the inside. At one place where we stopped, the village assembled to salute '*the Prince of Wales,*' because they happened to see on the inside of one of our trunks—'*H. Mortimer, trunkmaker to his Majesty and the Prince of Wales.*' At another place, they said we were the noblemen who had killed the king of Sweden, and were escaping into Italy. At last half dead, and quite satisfied with Quixotism, we reached Bellinzona, on the other side of the mountains ; and here we are, in Turin, alive and like to live.

* The passage here described is that of the St. Gothard, which at this time was much more difficult than it is at present.

"The whole continent at present seems a scene of universal hostility, and even Italy, which promised to be the last country which would suffer from French anarchy, is in a fair way to follow the example there offered. The poor King of Sardinia, old and worn out with care, sees his country rise in confusion all around him. We were presented to him yesterday."

Having now brought the subject of this memoir to Turin, where his own journal commences, it may be proper to state shortly, for the information of the reader, the general course of his employments, and the nature of his acquirements, during the period of his residence in Italy. It has already been stated, that a passion for travelling had early taken possession of his mind, but it would be difficult to convey an adequate notion of the strength and influence of this passion, in any other words than his own; and, fortunately, such present themselves to our notice in a little work which will be spoken of hereafter, written by him only a few months after his return from Italy. "An unbounded love of travel influenced me at a very early period of my life. It was conceived in infancy, and I shall carry it with me to the grave. When I reflect upon the speculations of my youth, I am at a loss to account for a passion, which, predominating over every motive of interest and every tie of affection, urges me to press forward and to pursue inquiry, even in the bosoms of the ocean and the desert. Sometimes, in the dreams of fancy, I am weak enough to imagine, that the map of the world was painted in the awning of my cradle, and that my nurse chaunted the wanderings of pilgrims in her legendary lullabies." To a mind thus panting for foreign climes, and glowing with all the warmth of poetic imagery, it was no small subject of triumph to have passed the barrier of the Alps, and to tread in the paths which had been hallowed in his eyes by the footsteps of Addison and Gray. But this was only a part of his enjoyment. The country which he had entered, abounded in scenes and objects, calculated, above all others, to awaken every pleasing association connected with his early studies, and to gratify his prevailing taste. The precious remains of antiquity dispersed throughout Italy, the fine specimens of modern art, the living wonders of nature, of which even the descriptions he had read, or the faint resemblances he had seen, had been sufficient to kindle his enthusiasm, were now placed before his eyes, and submitted to his contemplation and inquiry; nor were the springs and resources of his own mind unequal to the excite-

ment which was thus powerfully acting upon them. All those higher qualities which had hitherto been only partially exerted, or held as it were in abeyance, were now completely developed and brought into constant and vigorous action. At no period, even of his subsequent life, does he seem to have exerted himself with more spirit or with better effect. He made large and valuable additions to his stock of historical knowledge, both ancient and modern. He applied himself so effectually to the French and Italian languages, as to be able in a short time to converse fluently, and to obtain all the advantages of acquirement and information in both: and, what was less to be expected, by dint of constant and persevering references to those classical authors, whose writings have contributed either directly or indirectly to illustrate the scenery or the antiquities of Italy, he made greater advances in Greek and Latin than he had done before, during the whole period of his education. He studied with great attention the history and progress of the arts, and, more particularly, of the different schools of painting in Italy; reading carefully the best authors, conversing frequently with the most intelligent natives, and then with all the advantages of his own good taste and discernment, comparing the results of his inquiries with those of his own actual observation. By these means he laid in a stock of materials for conversation and reflection, which, treasured in his retentive memory, never wasted during the whole course of his life; and it is curious to observe how extensive, and at the same time how particular this knowledge was: there was scarcely a picture of any eminence in Italy, or a statue either ancient or modern, with the merits and history of which he was not acquainted; and though he never visited a second time that country, the impressions made upon his mind seemed to be as fresh and lively to the very last, as if they had been of yesterday. Nor was his attention less powerfully attracted towards those rich treasures of natural history, which the peculiar resources of the country, or the industry of collectors daily presented to him. Vesuvius, with all its various phenomena and productions, was his particular study and delight. He was the historian and the guide of the mountain, to every intelligent and distinguished Englishman, who came to Naples during his stay; and connecting, as he did, a considerable degree of science and philosophy, with all the accurate local knowledge, and more than the spirit and adroitness of the most experienced of the native guides, his assistance was as eagerly sought after as it was highly appreciated by his countrymen. He made a large collection of

vases and medals, many of which have since found their way into different cabinets of Europe ; and besides numerous valuable additions which he made to his own specimens of minerals, he formed several complete collections of Italian marbles and volcanic products for his friends. With his own hands he constructed models of the most remarkable temples and other interesting objects of art or nature in Italy ; and one particularly of Vesuvius,* upon a great scale, of the materials of the mountain, with such accuracy of outline and justness of proportion, that Sir William Hamilton pronounced it to be the best ever produced of the kind either by foreigner or native. These things he did, and much more, within an interrupted space of two years, during which, as it appears from his journal, so many of his hours were placed by his own good nature at the disposal of his countrymen in their literary or philosophical inquiries ; so many others were dedicated as a matter of duty to Lord Berwick and his concerns, and so many more were devoted to the pleasures of society, and to those active amusements which our countrymen usually assemble around them whenever they take up their abode together, and for which the fine climate of Italy is so well adapted, that it must be a matter of surprise to learn, that he was able to do so much for himself. Nor will this surprise be lessened, when it is known that besides his journal, he left behind him a great number of manuscripts connected with this tour ; among which may be mentioned some maps of his own construction, catalogues of several collections of books and natural history, and a long memorial, in the form of letters, addressed to young English noblemen and gentlemen upon the proper objects of study in travels. If it should be inquired, by what peculiar advantages he was able to effect all this, it may be said ; first, by an excellent constitution, which he never spared or managed, pursuing his objects unremittingly, by night as well as by day, and at times appearing to be indifferent to the common wants of nature, particularly of rest and sleep ; secondly, by the faculty which he possessed in an eminent degree of concentrating all the force of his mind upon the subjects which occupied it, and thereby rendering the impressions almost indelible : thirdly, by the admirable tact he at all times showed in discovering at once whatever savoured of genius or talent in the minds of others, coupled with the ready access which his own candour and ingenuity

* This model is now at Lord Berwick's seat at Attingham.

always gave him to mutual information and confidence ; and, lastly, by the extreme quickness with which he appropriated (but always in the fairest manner and with the most ample acknowledgments) whatever, either in books or conversation, had the slightest tendency to throw light upon the objects of his pursuits. To this may be added the power he possessed in a most remarkable degree of exciting the faculties of others. Within the sphere of his society and influence, there could be no such thing as what Mr. Burke calls the worst corrupter of science, stagnation. Wherever he was, the waters were sure to be troubled ; and whether the virtues derived from them were seized by himself or others, it mattered little to him, provided the process of information were going on. This will account in some measure for the fact, that with him much society was compatible with much improvement ; and that travelling, which is generally an interruption to the studies of other men, was in truth the great excitement, the support, and the instrument of his.

But to proceed with the narrative. Their intended stay at Turin was considerably shortened by the state of disquiet which actually reigned there, and the expectation of still greater disturbances which appeared to be impending over the city, from the influence of the French revolution, the march of whose principles in the crowded cities of Italy, seemed to be more alarming, than that of its armies on the frontiers. The good old king, then sixty-five years of age, to whom they were presented immediately after their arrival, lamented to them in the most ingenuous and pathetic terms, the ruin which threatened to overwhelm both the morals and the institutions of the people, and his own inability to resist it. For himself, he said, bowed down, as he was, with the weight of years, he had no anxiety ; but the fate of his country, which he loved, was a subject of the deepest interest to him ; and were it possible for any sacrifices of his to restore peace and serenity to the state, he would gladly die a thousand deaths to effect it. Some blood had already been shed in the city in consequence of a popular insurrection ; and the rumours from the country, where the kindly influence of the monarch was less felt, became every day more and more alarming. Under these circumstances, and with the advice of the English minister, Mr. Trevor, they determined to take up their winter quarters in some southern city of Italy, more remote from the focus of these troubles, where they might hope to find equal, if not greater, facility for their improvement in the language, with a prospect of more repose to

profit by it. Accordingly, they left Turin about the middle of the month; and, pursuing the same route which had been taken by Mr. Walpole and Mr. Gray, they passed through Novi to Genoa; there they were tempted to remain about a fortnight, delighted with the beauty and grandeur of its situation upon the Mediterranean, and struck with the magnificence of its palaces, and the profusion of its marble statues and ornaments. From Genoa they returned to Novi, and then crossing part of the spacious plain of Lombardy to Piacenza, they passed through Parma to Bologna, where they remained a week, occupied with the paintings and churches which usually attract the attention of travellers in that place. From Bologna they proceeded to the Apennines, which they were fortunate enough to pass in fine weather; and, descending into the territories of the Grand Duke, they proceeded immediately to Florence. This city, notwithstanding its numerous attractions, of which Mr. Clarke speaks with great rapture, did not upon this occasion detain them long: for it appears from his journal that very early in November they arrived at Rome, having passed through Sienna and Viterbo without stopping. From Rome, Mr. Clarke wrote a letter to his mother, of which the following is an extract.

“ROME, Dec. 5th, 1792.

“ — What a tract of country intervenes to divide us! and yet it is not the distance which makes me feel so far removed from you, it is the state of suspense which I am kept in with regard to your welfare. I can get no letters from England; I have written many to you and to my friends, but I receive no answer to any of them. When I was at Turin, I received those letters you sent to Bruxelles; since that time, I am as ignorant of English affairs as if I had been with Bruce to discover the source of the Nile. Some, I fear, have been idle, but I am sure *you* would not forget me, and therefore I fear those dæmons the democrats have intercepted your letters, and made use of them to set fire to the German villages. Lord Berwick is employing Angelica Kauffman in painting, and I am now selecting passages from the poets for her to paint for his house at Attingham. He has left me to follow my own taste in painting and sculpture. I have ordered for him two superb copies of the Venus de Medicis and the Belvedere Apollo, as large as the originals; they will cost near 1000*l*. In painting, I have selected two passages from Euripides, to be executed by Grignon; Freedom, from Chatterton's Ode, by Angelica Kauffman; his portrait, and another

allegorical painting, by the same artist. The sculpture will be executed by an English artist, in marble brought from Carrara. My time has been taken up in visiting all the artists, for we have been here three weeks comparing their works, and in taking the opinions of the oldest and best judges—except where it was mere party matter, and then I ventured to act from my own opinion. One thing I pride myself upon, and that is, that I have hitherto kept him from meddling with antiquities, and that I have almost cured myself of all my own folly in that way, by observing the wonderful system of imposition and villany that is practised here upon poor John Bull every hour in the day. The greatest of these Romans carry cheating to such a degree of ingenuity that it becomes a science; but in baking legs, arms, and noses, they really surpass belief. The shop of an antiquarian here reminds me of an almanack I have seen in England—where one finds a list of *hips, thighs, toes, fingers*, &c. adapted for every day in the week. Indeed Rome has been so long exhausted of every valuable relic, that it is become necessary to institute a manufactory for the fabrication of such rubbish as half the English nation come in search of every year. Our banker here is an Englishman—he represents our ambassador, for there is none at Rome; he has long been celebrated for giving his countrymen good advice, at the rate of 3000*l.* per cent. The other day he took me into his museum and begged I would purchase the nine muses and Apollo for Lord Berwick; cheap as dirt! says he, they are going at 300*l.* and the empress of Russia once offered me 1000*l.* I turned the joke sadly against him the next evening at Mrs. H.'s, by proposing a subscription to be set on foot for his *brown bob-wig to succeed Lord Balmerino's head upon Temple-bar*. He has not forgiven this, for this morning he gave a grand breakfast to the prince, and we were excluded from the general invitation."

The time they remained at Rome, not more than four weeks, although diligently and actively employed, was scarcely sufficient to furnish Mr. Clarke with the means of giving even a rapid sketch of a city which has been justly described as comprising within its circuit, amusement and interest enough for years. But he was too wise to attempt it; he was more anxious at that period to see, and to learn from others, than to record his own observations and opinions: and he frankly declared that such was the variety of objects and circumstances which crowded upon his mind during this month, that he had not time even to note them in his journal; they were

not lost, however, either to himself or his friends, for many interesting notices of this city are found dispersed throughout his works; and still more frequent allusions to them were brought forward in his conversation.

Our travellers left Rome about the first of December, and after a safe and agreeable journey of two days, arrived at Naples; in which delightful city, or in its still more delightful environs, they remained for nearly two years, occasionally visiting other parts of Italy, as the season invited, or agreeable opportunities occurred. For the first six months of his residence at this place, viz. from the early part of Dec. 1792, the date of his arrival, till the middle of June, 1794, Mr. Clarke seems to have kept no journal of his proceedings; nor does there appear among his papers even so much as a memorandum for his own use; but, judging from his subsequent statements, he seems to have been occupied properly enough, partly in studying the language, and partly in making himself acquainted with all the remarkable places and objects in the neighbourhood, and with the characters and acquirements of the persons with whom he was to live. From the middle of June, however, his time is regularly accounted for; and to his journal of this period, in conjunction with the letters, the reader will be referred for the principal circumstances of his life, till his return to England: with this caution only, which is applicable to the whole, that whatever statements or conjectures connected with philosophical or scientific subjects may appear in them, must be considered only as exhibiting the state of his knowledge, or the inclination of his judgment at the time, and not as pledging him permanently to opinions, some of which were in fact superseded, and others modified by the results of his maturer inquiries in his later life.

“June 12, 1793.—I made my twelfth expedition to Vesuvius, and my third to the source of the lava, in company with Sir John and Lady L. and a large party. The day was excessively hot, the thermometer, which all the month of March and April had vibrated from 50 to 60, now stood at 78. A Sirocco wind added to the closeness of the air, and rendered our excursion tedious and difficult. We dined at the Hermitage, and then proceeded up the mountain. Mrs. H—— had hysteric fits at the second crater, owing to the great power of the sun and over-fatigue; nevertheless, she reached the source of the lava, and was very near killed by a large stone from the crater that flew by her like a wheel. The guides

were with reason astonished at our females, since, excepting a few Englishmen who had accompanied me this year, no person, either male or female, had been known to visit the source of a stream of lava while in an active state.

"It was in the month of February that I went with a party to the source of the lava for the first time, to ascertain the real state in which the lava proceeded from the volcano that created it. I conducted Lady P. to the second crater, and then we proceeded by ourselves. I found the crater in a very active state, throwing out volleys of immense stones transparent with vitrification, and such showers of ashes involved in thick sulphurous clouds, as rendered any approach to it extremely dangerous. We ascended as near as possible, and then crossing over to the lava attempted to coast it up to its source. This we soon found was impossible, for an unfortunate wind blew all the smoke of the lava hot upon us, attended at the same time with such a thick mist of minute ashes from the crater, and such fumes of sulphur, that we were in danger of being suffocated. In this perplexity, I had recourse to an expedient recommended by Sir W. Hamilton, and proposed immediately crossing the current of liquid lava to gain the windward side of it, but felt some fears owing to the very liquid appearance the lava there had so near its source. All my companions were against the scheme, and while we stood deliberating, immense fragments of stone and huge volcanic bombs, that had been cast out by the crater, but which the smoke had prevented us from observing, fell thick about us, and rolled by us with a velocity that would have crushed any of us, had we been in their way. I found we must either leave our present spot or expect instant death; therefore covering my face with my hat, I rushed upon the lava and crossed over safely to the other side, having my boots only a little burnt and my hands scorched. Not one of my companions however would stir, nor could any persuasion of mine avail in getting a single guide over to me. I then saw clearly the whole of the scene, and expected my friends would every moment be sacrificed to their own imprudence and want of courage, as the stones from the crater fell continually around them, and vast rocks of lava bounded by them with great force. At last I had the satisfaction of seeing them retire, leaving me entirely alone. I begged hard for a torch to be thrown over to me, that I might not be lost when the night should come on. It was then that André, one of the Ciceroni of Resina, after being promised a bribe, ran over to me, and brought with him a bottle of wine and a torch. We had

coasted the lava ascending for some time, when looking back, I perceived my companions endeavouring to cross the lava lower down, where the stream was narrower. In doing this they found themselves insulated, as it were, and surrounded by two different rivers of liquid fire. They immediately pressed forward, being terribly scorched by the combined heat of both the currents, and ran to the side where I was; in doing which one of the guides fell into the middle of the red hot lava, but met with no other injury than having his hands and face burnt, and losing at the same time a bottle of Vin de Grave, which was broken by the fall, and which proved a very unpleasant loss to us, being ready to faint with excessive thirst, fatigue, and heat. Having once more rallied my forces, I proceeded on, and in about half an hour I gained the chasm through which the lava had opened itself a passage out of the mountain. To describe this sight is utterly beyond all human ability. My companions, who were with me then, shared in the astonishment it produced; and the sensations they felt in concert with me, were such as can be obliterated only with our lives. All I had seen of volcanic phenomena before did not lead me to expect such a spectacle as I then beheld. I had seen the vast rivers of lava that descended into the plains below, and carried ruin and devastation with them; but they resembled a vast heap of cinders on the scoræ of an iron foundry, rolling slowly along and falling with a rattling noise over one another. Here a vast arched chasm presented itself in the side of the mountain, from which rushed with the velocity of a flood, the clear vivid torrent of lava in perfect fusion, and totally unconnected with any other matter that was not in a state of complete solution, unattended by any scoræ upon its surface, or gross materials of an insolvent nature, but flowing with the translucency of honey, in regular channels cut finer than art can imitate, and glowing with all the splendour of the sun.

“The eruption from the crater increased with so much violence, that we proceeded to make our experiments and observations as speedily as possible. A little above the source of the lava, I found a chimney of about four feet in height from which proceeded smoke and sometimes stones. I approached and gathered some pure sulphur, which had formed itself upon the edges of the mouth of this chimney, the smell of which was so powerful, that I was forced to hold my breath all the while I remained there. I seized an opportunity to gain a momentary view down this aperture, and perceived nothing but the glare of the red hot lava that passed beneath

it. We then returned to examine the lava at its source. Sir W. Hamilton had conceived that no stones thrown upon a current of lava would make any impression. We were soon convinced of the contrary. Light bodies of five, ten, and fifteen pounds weight made little or no impression even at the source, but bodies of sixty, seventy, and eighty pounds, were seen to form a kind of bed upon the surface of the lava and float away with it. A stone of three hundred weight, that had been thrown out by the crater, and lay near the source of the current of lava, I raised upon one end and then let it fall in upon the liquid lava, when it gradually sunk beneath the surface, and disappeared. If I wished to describe the manner in which it acted upon the lava, it was like a loaf of bread thrown into a bowl of very thick honey, which gradually involves itself in the heavy liquid that surrounds it, and then slowly sinks to the bottom. The lava itself had a glutinous appearance, and although it resisted the most violent impression, seemed as if it might easily be stirred with a common walking stick. A small distance from its source, as it flows on, it acquires a darker tint upon its surface, is less easily acted upon, and, as the stream gets wider, the surface having lost its state of perfect solution grows harder and harder, and cracks into innumerable fragments of very porous matter, to which they give the name of scorix, and the appearance of which has led many to suppose, that it proceeded thus from the mountain itself, being composed of materials less soluble than the rest of the lava, lighter, and of course liable to float continually on the surface. There is, however, no truth in this. All lava has its first exit from its native volcano, flows out in a liquid state, and all equally in fusion. The appearance of the scorix is to be attributed only to the action of the external air, and not to any difference in the materials that compose it, since any lava whatever, separated from its channel, at its very source, and exposed to the action of the external air, immediately cracks, becomes porous, and alters its form. As we proceeded downward, this became more and more evident, and the same lava which at its original source flowed in perfect solution, undivided, and free from loose encumbrances of any kind, a little farther down, had its surface loaded with scorix in such a manner, that upon its arrival at the bottom of the mountain, the whole current resembled nothing so much as a rolling heap of unconnected cinders from an iron foundry.

“The fury of the crater, continuing to increase, menaced us with destruction if we continued any longer in its neighbourhood. A large stone thrown out to a prodigious height.

hung for some time over our heads in the air. Every one gave himself up for lost until it fell harmless beyond us, shattering itself into a thousand fragments which rolled into the valley below. We had not left this spot above five minutes before a shower of stones, issuing from the crater, fell thick upon it, covering the source of the lava, and all the parts about it; so that, had we waited, as I begged to do a little longer, every one of us would have been crushed to atoms.

"During my second visit, the appearances were pretty much the same. I thought the lava flowed slower, and was less in fusion than before, the surface appearing tougher and being sooner converted into scorix. We dressed our beef steak upon the lava, as we had done before, no fire being better calculated for that purpose, owing to the excessive heat it gives.

"Upon my third visit of this day, I found the lava had taken a different course, and flowed towards the Torre del Annonciato, whereas it had before proceeded in a channel exactly opposite the cross. The source itself had undergone great alterations, and bore strongly the marks of an earthquake."

"June 19, 1793.—Went to hear the avocats plead in the courts of justice. These people are remarkable for the fluency and passion with which they speak, far outvying our most boasted orators, in gesture, voice, and energy. But it is all to no purpose, since justice is a virtue unknown to the Neapolitans. From the judge to the shirri, every one is actuated according to the nature of the bribe he receives, and if a criminal can raise money sufficient to feed the avarice of these harpies, he may prevent his trial from ever taking place. There are 40,000 lawyers in Naples, great part of which being half starved, and out of employment, are ripe for any mischief proposed to them. There never was a government in which the police of the law could be worse administered than at Naples. If a wretch is apprehended for any crime, he has nothing to do, but bribe as long as he can; when after a certain period the whole affair becomes obsolete, and he is suffered to rot in his jail. Lord G ——— told me of a circumstance he had been witness to in coming from Pæstum. Some shirri had apprehended a poor boy, and were endeavouring to make him swear against his mother whom they suspected of coining. They first made him drunk, and then prefaced their questions by promising, that if he proved her guilty, he should ride home with them in a calash, and have macaroni for his supper. Thus tempted and bewildered, the poor child said

just as they pleased, and the innocent mother was hurried to prison, where, having no money to prove her innocence or buy her food, she will probably starve. Sir William Hamilton relates a curious fact, also, of Neapolitan justice. Some Englishmen, at Vietri, had been compelled to pay an enormous bill by a rascal, who presented his stiletto to their breasts, threatening to stab them if they refused. Sir W. seldom does much for his countrymen, but this being so flagrant an instance of violence, he exerted himself to bring the offender to punishment. He complained to the king. Mandate after mandate was issued to no purpose for a long time, till the villain having no longer wherewithal to pay for his liberty, was apprehended and tried. The judge asked Sir W. what they should do with him. *Nothing!* said he, *let him go about his business!* The king hearing this was astonished, and asked Sir W. why he made so much fuss for nothing. If, said Sir W., he had been taken earlier, according to your promise that he should, I would have had him punished. At present he has been punished sufficiently, having bribed your lawyers, till he is ruined. *Why,* said the king, *how much do you think he has paid?*—*As much as he was worth,* replied Sir W. *Ay,* said his majesty, *and a great deal more!!!*"

"June 26, 1793.—In the evening we took our boat for Amalfi to see, not only what is supposed to be the finest coast in Europe, but also a very fine fête at that town in honour of their patron St. Andrew, with music, fire-works, pageantry, &c. The view of this coast is sublime to a degree; the lofty mountains, rising out of the bosom of a vast expanse of waters, now covered with verdure, now breaking in enormous columns of the boldest perpendicular rock, whose tints are of a thousand varieties. Half way down the sides of this romantic coast, I discerned villages scattered thicker and thicker as the eye descended, till near the bottom the surface is covered with white houses and orange groves. On the boldest and most towering points, convents, monasteries, and churches are placed, and in the deep dales that split the mountainous ridges, are jammed the four principal towns of the coast. The shore is craggy and bold, turned into many grotesque forms, with dark caverns, paths, and buildings, hanging in a tremendous manner over the brow, while beneath lies the wide surface of the sea, enlivened by crowds of light skiffs that scud across its surface. Near Majuri is a large cavern full of stalactites, which, being broken from the roof, are tossed about by the waves till they are smoothed and rounded.

They are of a milky whiteness and well polished, and resemble the concretions called *Confetti di Tivoli*. We passed before Cittori, Majuri, and Minuri, a smaller town dealing also in macaroni, formerly the dock yard of Amalfi; then doubling a promontory we lay on our oars to contemplate the town of Atrani, which is squeezed between two cliffs, joined together by buildings. A road winds up this valley to Ravello and Scala, two episcopal cities that hang in a straggling manner, high over the town of Atrani on the mountain tops. Turning round another rock or promontory, the beautiful town of Amalfi opened upon us, in a situation similar to that of Vietri, but upon a larger scale.

"Amalfi is but a shadow of what it once was, when it extended over the stupendous rocks that hang on each side still crowned with battlemented walls and ruined towers. The cathedral is in the least agreeable of those styles of architecture that were invented or adopted, when Grecian rules and proportions were forgotten. There is a great mixture of ancient pillars and columns of red Egyptian granite, with a tawdry ugly olio of Gothic and Saracenic arches, which have not even the lightness usually peculiar to that style of building. Among some rocks at a part of the coast called Capo d'Ureà, between Atrani and Cittori, is a cavern where the sea rushes in with a noise like the roaring of fifty distant cannons; no mortal dares approach its yawning mouth; a boat would be sucked in and instantly dashed to pieces. Cittori looks extremely beautiful. It has been three times washed into the sea by the torrents of melted snow and rain water from the mountains above. The terrific grandeur of these cliffs perhaps surpasses the scenery at Lucerne. The variety of colours, purple, red, blue, and yellow, form so remarkable a spectacle, that were it represented in a picture, no one would believe it to be correct. On a spot, where one supposes no living being could approach but the falcons of the air, is stuck a convent, which formerly contained thirty nuns."

"July 1, 1793.—In passing Vesuvius I plainly saw the whole outline of Somma as it must have remained when first the old cone fell in. This accounts for an observation of the younger Pliny, who was at Misenum when the great eruption of 79 began. He says, at first they were at a loss to know which mountain the smoke proceeded from. I consider this as a very curious fact, and a very singular proof of the non-existence of the present cone of Vesuvius at that period; because whoever looks at the amazing size of the mountain in

its present state, and the conspicuous object it forms from Misenum, will be convinced of the folly of such an observation, supposing the smoke to have proceeded from its present crater, which is visible in a very great degree to all that part of the country in which Pliny at that time was. I am of opinion, that the eruption began in the centre of the present circle of Somma, as it stood when the old cone had fallen in, and the mountain had been dormant for ages, as all writers describe it to have been so before the great eruption. Whoever has witnessed the astonishing increase of the cone of Vesuvius since the year 1784, when it was as much below Mount Somma as it is now above it, will not wonder at being told the whole of the present cone has been formed since that period. Indeed, it appears to increase in a proportion so inadequate to the circumference of its base, that I think it highly probable it will fall in a second time in the course of three or four years, supposing the volcano to continue upon an average as active as it has been for the last two years. I think Sir W. Hamilton mistakes very much when he calls Astruri, the lake d'Agrano, la Solfaterra, &c. &c. the craters of extinct volcanos; they are rather the shells or bases of the cones of volcanos whose craters have fallen in, like the situation of Vesuvius before the birth of the present cone, which situation they exactly resemble. I should think the falling in of a cone, generally, is effectual in causing a temporary extinction of its volcano, and the subterranean fire being partially smothered, is apparently dormant for a length of time, and then breaks out again with redoubled violence: as was the case of Monte Nuovo, thrown up in twenty-four hours, some ages after the extinction of the Solfaterra; and of Vesuvius, in the great eruption of 79, which broke forth after having been inactive for a period almost beyond record, and in one half hour buried whole cities with their inhabitants, besides the town of Stabia, and innumerable villages, driving back the sea, drying up rivers, and changing the whole face of the country."

"July 17, 1793.—I am much refreshed by sitting in the cool air of the balcony to my breakfast room; and amused with the enchanting prospect I have now before my eyes. All the bay of Naples, covered with light skiffs and pleasure boats; Vesuvius and Somma receiving the gilded rays of the setting sun, which tinges all the coast of Sorrento and the island of Caprea, with a pale violet, inexpressibly soft and beautiful; Portici glittering in white splendour over the fatal lavas that buried Herculaneum seven times beneath their de-

structive floods; St. Jorio hanging on the venerable sides of the fertile Somma, amid vineyards and groves of citron; the throng of shipping in the mole, whose masts rise like a forest; the crowded Chiaia, the parade of carriages, like one vast procession; the busy Lazzaroni of St. Lucia, and the idle herd of soldiers in the opposite barracks; the rich melody of the evening band, whose deep swelling notes seem wafted with the cool breezes from the sea; the currents of liquid lava that course each other down the shaggy cheeks of Vesuvius, and, as the sun sinks lower, assume a brighter hue which, while I write, increases to vivid fire: all these form such a spectacle—so interesting a prospect, and so enlivening a scene, that it baffles all description, unless one's pen possessed the power of pouring forth 'thoughts that breathe, and words that burn.'"

"July 24, 1793.—While we were at tea in the Albergo Reale, such a scene presented itself as every one agreed was beyond any thing of that kind they had ever seen before. It was caused by the moon, which suddenly rose behind the convent upon Vesuvius; at first a small bright line, silvering all the clouds, and then a full orb that threw a blaze of light across the sea, through which the vessels passed and repassed in a most beautiful manner. At the same time, the lava, of a different hue, spread its warm tint upon all the objects near it, and threw a red line across the bay, directly parallel to the reflection of the moon's rays. It was one of those scenes which one dwells upon with regret, because one feels the impossibility of retaining the impression it affords. It remains in the memory, but then all its outlines and its colours are so faintly touched, that the beauty of the spectacle fades away with the landscape; which when covered by the clouds of the night and veiled in darkness, can never be revived by the pencil, or the pen, or by any recourse to the traces it has left upon the mind."

"July 25, 1793.—My spirits very low all this day; a species of malady I have not felt a long while. In the evening Lord Berwick went to Naples. I chose to remain at home, and enjoy the solitude and serenity of the place. I had the ass saddled, and rode through beautiful vineyards, and groves of figs, towards the fosse grande upon the mountain. At my return I drew some sketches of the pomegranate. The view from my window by moonlight is beautiful beyond description. Not a cloud, but what proceeded from the smoke of Vesuvius, which threw a line across the mountain, as far as the eye could reach, forming a grand arch over the

moon, while the lava heightened the scene by its fiery lustre. Certainly there never was an object which added so much to the beauty of a landscape as Vesuvius. The infinite variety in its tints—the different forms it assumes in different points of view—the endless changes that take place from the crater, all help to make one of the grandest spectacles in the world, still more interesting. As I rode up it this evening, the whole cone of Vesuvius was tinged with the most lively purple, while Somma presented the brightest green, intermingled here and there with shades of a darker hue. Such a Tyrian splendour covered the cone, that I am sure no person would believe it to be natural, could it be faithfully represented upon canvass.”

Dr. Clarke wrote as follows to his mother and sister, from St. Jorio, near Naples, his letter bearing date July 25.

“My dear mother and sister,—Your letter to Lord Berwick has put us both into a sad consternation for either all our letters to England for some time have been intercepted here, or lost in their passage. I have written letter after letter to you, and could get no answer. The same has been the case with Mr. Tufton; and also I enclosed to Mr. D. all my Latin letters to the fellows of Jesus College, the fate of which I have never been able to learn. The last I sent to you was written upon my birthday, June 5, I think it was a very long one, upon a folio sheet. Not having heard from you so long I began to be seriously alarmed. At last your letter arrived to Lord B., with a black seal; I knew the seal, and snatched it out of his hand in an agony; for what could I suppose, but that my sister was dead, and that he was to break it to me? Let me beg of you never to serve me so again. You have no idea how it frightened him as well as me. As for my letters, if you have not now received them, the court here has destroyed them, for we well know that all letters are opened before they leave the kingdom; and if, by chance, I hit upon any political subject, I suppose they made it a pretext for suppressing my letters. I shall venture this once more, and if I have not an answer in six weeks, which is the regular time, if you write by return of post, I will get Sir W. Hamilton to state the whole affair to the king, who is very good to the English, and I know will pay attention to it. I wrote to you from Rome during the holy week, but I have never received any answer. We have now taken a villa in the country, among

the vineyards and the orange groves at the foot of Vesuvius. This is a great pleasure to me. As I lie in my bed I hear the mountain groan and belch; and last Wednesday morning we had an earthquake which lasted five minutes, but I was so fast asleep I never perceived it. They told us so much of the great heats we should endure, that I expected to be melted. 'Tis all a farce! thin clothing and sea bathing keep me cool; and as yet I have never known the thermometer higher than 86, and on that very day I danced the fandango with Lady P——. I have hardly strength to tell you of it. We are in daily expectation of the French fleet."

Although the account of the miracle of St. Januarius has been given by every traveller in Italy, yet the following description by Dr. Clarke in his journal, of the scene witnessed by himself, will not be deemed uninteresting.

"August 11th, 1793.—And now I am on the subject of processions, I shall describe the famous miracle of the liquefaction of St. Januarius's blood which I was an eye-witness of, and saw to the greatest possible advantage.

"Previous to the anniversary of this celebrated miracle, I was invited by the Duke di Sangro to a ball given upon that occasion at his own house. The sedia in which the miracle was performed was exactly opposite his balconies. I arrived there about half past five. The princess of Sweden, with all her suite, the Neapolitan nobility, and all the English, were already there. I found the streets thronged with carriages, and such an innumerable concourse of people, that I was obliged to descend from mine some time before I got to the house. The balconies were already filled, and as I had a great curiosity to be a nearer spectator I descended among the throng, meaning to enter the sedia. Several that I met assured me of the danger attending it, as they are very apt to suppose that the presence of heretics impedes the miracle, and there have been instances where strangers have been much insulted, and very roughly handled, when the miracle did not take place immediately. Curiosity, however, surmounted every consideration with me, and by dint of hard pushing, I made way to the entrance of the sedia. The sentinels repelled me rather rudely, and ordered me to withdraw. I told them I was an English gentleman, a great believer in miracles, and begged for the sake of St. Januarius, they would not deprive me of the satisfaction of beholding one so remarkable. A small bribe urged more in my behalf than all my

faith ; and I was directed to mingle with a procession of Carthusian friars, and pass in. I did so, and succeeded, notwithstanding the ridiculous contrast that was offered by permitting an officer in the English uniform to walk in by the side of a barefooted monk with his cowl and rosary.

“ The sedia was illuminated both within and without, by an abundant display of lamps and tapers. The inside was hung with the richest tapestry, profusely ornamented with lace. The grand altar glittered with ten thousand lights, covered with imagery, and laden with riches of every denomination. Jewels, gold, and silver, were lavished, without taste, but in the greatest profusion. Under the cross, on the right hand, was placed the bronze bust which is supposed to contain the head of the Saint. Opposite to this altar were two extensive orchestras, filled with upwards of two hundred performers, both vocal and instrumental. In the space between, a file of soldiers formed a passage for the grand procession to pass through, and the rest was filled by a miscellaneous assemblage of old women, girls, priests, abbés, &c. A shout from the populace without announced the approach of the sacred phials. The music began. First came a procession from all the convents in Naples, dressed in the different habits of their order, and bearing standards before the image of their patron saint. Each of these, as they passed, rested their saint for a few seconds, before the head of St. Januarius. This continued for some time, and after these appeared the images of saints ; of massive silver, richly burnished, and as large as life ; each borne on the shoulders of four men, and each in his turn paying its devoirs to the head of the Saint. Last of all, with a slow and solemn pace, covered with a canopy, appeared the phials containing his blood. These were incased in a circular hoop, with two faces of glass, which being transparent, showed the phials to the greatest perfection. I perceived they were about half full of a dark purple liquor. A dead silence ensued as they approached the sacred head ; the music ceased ; the audience fell on their knees in an awful and anxious expectation. It arrived, and rested opposite the head ; but remained congealed. The Bishop then took down a small case containing the phials, and turning them round several times to show that the blood still remained in a congealed state, placed them on the altar, beneath the cross. Five minutes ensued, the people still quietly waiting for the event. The bishop then pronounced the words ‘Ora pro nobis!’ and all the people repeated them after him. For five minutes afterwards they continued to re-

peat the words 'Ora pro nobis !' A quarter of an hour passed, and I observed all the musicians looked alarmed, and betook themselves to prayers. Loud murmurs began ; the clamours of the old women and the populace without grew very tumultuous. They beseeched God Almighty, our Saviour, and the Virgin, to intercede with St. Januarius in their behalf. I began to feel very uneasy, and did not dare to look up, lest some fanatic, in a fit of zeal, should think proper to rid them of a heretic. An Abbé stood near me, with his watch in his hand, interrupted every minute with my inquiries as to the time that had elapsed ; twenty minutes, twenty-five minutes, thirty minutes passed, and the miracle was not made. If anxiety would have passed for a mark of faith, no bigot at that time evinced more sincerity than I did. The cries of the old women redoubled. The girls screamed. The men squalled. I trembled. 'St. Januarius make the miracle !' was heard from all quarters. At last, the consternation became general. The abuse they poured forth against their Saint was of the lowest kind. Among other things, I heard loud exclamations of—'Oh, you yellow-faced dog!—you dirty scoundrel!—you ungrateful rascal!—Is this the way you repay us for all our services? we that are your faithful votaries. Are you not ashamed of yourself, you yellow-faced hangman?' The old women screamed most bitterly, and, at last, giving a horrible shriek, they descended from some benches, and rushed through the soldiers, making their way in spite of every obstacle towards the Bishop, when to my inexpressible satisfaction, the miracle was proclaimed ; the music again struck up, and all the people shouted for joy. Nothing now was heard but—*Viva ! Viva ! San Genarrio—live for ever blessed best of Saints, the patron and protector of us all !* The Bishop, elevated above the crowd, now held up the phials to the people, turning them round and round, to show the motion of the blood. I drew near, and as he held them to every body, I had a perfect view of the liquefaction. The matter within the phials, as it began to dissolve, at first appeared ropy like pitch or treacle, but soon after assumed an appearance perfectly liquid. The people were permitted to approach and kiss them ; and those who were afflicted by diseases had the parts affected touched by them, which they suppose to be a certain cure. In the evening the streets were illuminated. The night passed in feasting and rejoicing. I returned to the Duke di Sangro's, where every body seemed to have caught the general glee. The Princess of Sweden on that

night honoured me with her, hand and we danced the whole evening.

"The superstition of the Neapolitans, with regard to St. Januarius, is astonishing in an age so enlightened as the present. They suppose that the Deity has nothing at all to do with regard to Naples ; that it is the peculiar province of that Saint to patronize, superintend, and protect the Neapolitans, and that God has promised not to interfere with his government. During the great eruption of 1767, the enraged populace tore down the house of the cardinal Archbishop because he refused to oppose the relics of St. Januarius to the fury of the mountain. They were afterwards carried in procession towards the Ponte Maddelona, and they tell you that at the moment they arrived there the eruption ceased.

"In commemoration of this instance of the indulgence of St. Januarius, they erected a marble statue of him upon the bridge, in which he is represented, with one hand opposed to Vesuvius, and the other holding the phials of his blood."

"August 22, 1793.—There was to-day, a most singular appearance in the mountain : on opening the shutters to view it, I perceived the crater to be in great agitation ; puff after puff, impelling each other with the greatest violence. I could perceive thousands of stones and scorizæ thrown into the air, and falling in all directions. The clouds from the crater were as white as the purest snow ; on a sudden, as I was looking at these, a column of smoke rushed impetuously out of another mouth behind the crater, as black as the deepest ink, and rising in curling volumes to a vast magnitude, formed a pillar perfectly unconnected with the smoke from the crater, and presented a striking contrast by opposing its jet black to the snowy whiteness of the other. These appearances continued at intervals the whole day. It had been taken notice of at Naples, as some friends who called this evening, informed me. Sometimes the two columns of different colours rose together, as if emulating each other, and striving who should rise the highest, and display the greatest magnitude, but never mixing or interfering with each other. The mouth of the black smoke I know very well, as I once descended into it for some sulphur and vitriolic acid during a visit to the crater. It lies behind the great crater, and a little below it. The lava during these phenomena appeared rather diminished.

"These appearances continued during the whole day, and at night such a scene presented itself as it is impossible to give the least idea of. H—— came to sit with me, and hearing him exclaim as he entered, I ran to the window, and

saw the most beautiful gleam of light break over the side of Vesuvius, under the long arch of white smoke ; in a few minutes rose the full moon, which contrasting its silver light with the red fire of the crater and the lava, became a spectacle which is not to be described. Some friends who had left me now returned, and we placed ourselves round the balcony to feast our eyes with a picture so singular and so beautiful. Many people thought they felt an earthquake during the whole night. I am almost sure I did about ten o'clock, which continued now and then till I fell asleep. The first symptoms of it were a shaking at my door, which deceiving me, I cried out *Come in !* as I thought somebody was there. Afterward it shook with so much violence that it seemed to affect the whole house in a slight degree. However, I should never have called these things to my mind, if others had not said they also were disturbed by the same noises, and that they supposed it to be an earthquake. Upon questioning the two laquais de louage, they both remembered to have been awakened by a great noise at the window, in the ante-room, as they were waiting for Lord Berwick ; so much that they thought a thief was breaking in : and this noise corresponded with the time of the greatest shock I heard, which was about eleven o'clock. A friend told me since, he was kept awake by these repeated noises the whole night."

"August 30th, 1793.—Returning home we had a sight that put all such nonsense out of my head. (*He had been describing some artificial fire-works which he had just seen.*) The lava which was last night so great, this evening suddenly stopped ; hardly a trace of it was visible. But the crater displayed such girandoles of fire, such beautiful columns of bright flame, as I think I never saw before. Millions of red-hot stones were shot into the air, full half the height of the cone itself, and then bending, fell all round in a fine arch. As soon as I got home, I fixed the telescope. Sometimes in the middle of the clear flame, another and another still more bright and glorious displayed itself, breaking on the eye like the full sun ; so that the interior was always the most luminous. It is only now that I lament being confined from passing the night on the mountain. The interior and bright attendants upon the principal column, seemed to be lava in perfect fusion, which boiled and bubbled up above the crater's edge : and, sometimes falling over it, I could perceive splash upon the cone, and take its course gently down the side of the mountain. Sometimes, and more usually, it fell again into the crater. I write this with the burning

mountain now before my eyes. All the top of the cone is covered with redhot stones and lava. The flame at the crater continues without intervals of darkness as usual. It is always in flame, or rather the clouds of smoke tinged with the reflection of the boiling matter within, are like burnished gold, and as bright as fire.

“The atmosphere being clear, and free from other clouds but those of the crater, rendered this astonishing spectacle still more sublime. Oh! that I could give to this paper the power of recalling to my recollection the vivid splendour of such a scene as I have now before my eyes. But the impression remains not. The extreme brilliancy of it operates upon one sense only. The impression is conveyed to the mind, but the effect is weakened every time it is recalled by the memory; and thus it is, that we think every succeeding eruption still more beautiful than the one which preceded it.”

“Sept. 5, 1793.—Vesuvius continues to throw most superbly; the lava flows again; at sunset he showed that Tyrian hue, which he assumes sometimes, and which has a glow beyond description. I find I begin to speak Italian, so as to make myself easily understood, and to comprehend the bawling in the streets. I had undressed myself, and was prepared to get into bed, when a violent shock from the mountain agitated the door of my room, so as to startle me not a little. I went into my sitting-room, and upon opening the window towards the mountain, I perceived all the top of the cone covered with redhot matter. At the same time such a roaring was heard, as made me expect something more than common. In an instant, a column of lucid fire shot up into the air, and after ascending above half the height of the cone itself, fell in a glorious parabolic girandole, and covered near half the cone with fire. This was followed, after an interval of about thirty seconds, by a shock which agitated the doors and windows, and indeed the whole house, in a most violent manner; immediately after this shock, the sound of the explosion reached us louder than the greatest cannon, or the most terrible thunder, attended with a noise like the trampling of horses' feet, which of course was nothing more than the noise occasioned by the falling of so many enormous stones among the hard lava. The shock of this explosion was so violent, that it disturbed many things I had left on my table, such as brushes for painting, cups for mixing colours, &c. I dressed myself again, and remained in the balcony above an hour, during which time I had the pleasure of be-

holding Vesuvius in his terrific grandeur, and more awfully sublime than I had ever seen him before. While I was thus amused, Mr. R. passed under the window—What do you think of this scene? said I. ‘Why, I think you will not go to bed to-night, if it continues.’—Have you ever seen it finer? ‘I never have; and the consul, Sir James Douglas, has just been observing to me that he never saw the mountain so agitated since the great eruption of 1779.’”

“September 16th, 1793.—Went to Naples. Called on C. the antiquary; gave my black fluted vase to be restored. In washing a small glass vessel, which had been found with the vases in the neighbourhood of Taranto, as soon as the water was poured in, a strong offensive vapour exhaled, which was plainly felt by all of us. C. told me it is an odour peculiar to most of these ancient vessels. I did not get rid of the effects of it for some time.

“The manner in which the amazing force of putrefaction is exemplified upon the Greek vase is wonderful. It is found to surpass ten times the strength of the purest vitriolic acids. Aquafortis is as water, when compared to the acid that is generated by putrefaction. For we observe those parts of the vases that have lain in contact with it, that is, that touched the bodies in the respective sepulchres, have been most amazingly corroded; whereas the other parts are entire. Now, when we know that the varnish upon these vases is found to resist every acid we can apply to them; and that, being washed with the aquafortis, they only appear more perfect and beautiful from the operation, we cannot but admire the astonishing power of that acid, which was formed by the putrefaction of the body, and which was capable of corroding the hardest varnish of the most beautiful vases, during the short time that could intervene between the interment of the body and its subsequent state of dust, in such a manner, as in some instances which I have seen, to eat through not only the exterior coating of the vase, but through the clay itself.

“The difficulty of being imposed upon in the article of vases, must necessarily occasion no small degree of satisfaction to the buyers of them. The almost impossibility of copying, with any degree of accuracy, those beautiful designs; the clumsy proportions and heavy materials of modern workmanship; the want of brilliancy in the varnish; and, above all, the certain impossibility of adding that hoary and venerable tartar, which is acquired only in a long series of revolving ages, which no art can imitate, nor any ingenuity compose;

these circumstances alone allow every facility to the amateur, in determining the validity of his purchase. But, setting all these aside, and supposing that people less skilled in discerning the real traces of time and the hand of ancient artists, wish to be possessed of these valuable relics without having a knowledge of the fine arts—without being able to discern beauty from deformity in the design—the want of proportion in the workmanship, brilliancy in the varnish, or the real nature of the tartar, which accrues to the surface ; one simple inevitable test, easy in the execution and indisputable in effect, will at all times determine the truth, and distinguish the original from the imitation. Let a sponge be dipped in the vitriolic acid, and with this let the whole surface of the vase be washed. If it be really the genuine work of antiquity, it will resist the attack of the acid, and shine more brilliant and more beautiful from the operation. But if it is a modern production, not all the ingenuity of the fabricator, nor the powers of his fire, can defend it from detection. The sponge will wipe off both the design and the varnish, and, disrobing it of its borrowed plumage, betray at once the hand and the workmanship of a modern mason. So simple and so easy is the operation, that the power of detecting truth from falsehood is, by this means, alike open to all, and with such instructions, it would appear to me a matter of surprise if the discernment of a child should fail.

“ But at the same time it should be mentioned that, when a person is possessed of a vase, apparently valuable, care should be taken in the operation. The possessor should first see if any white ornaments are to be found about it, as the strength of the vitriolic acid will sometimes materially injure these. In this case he will wash those parts which are the least liable to be injured, as the trial of one portion is equally a test for the whole ; supposing the vase to be sound, and to wear no mark of having been restored. Not that a vase is always to be considered as without value, or a genuine vase at all less valuable, for having been restored. Many of the finest were found broken into several pieces ; perhaps by earthquakes, or perhaps originally so placed there. In the king's collection is one that has been completely restored, which was found in above one hundred pieces. And here again some caution is necessary. A skilful artist will so restore the scattered fragments of a broken vase, that they shall appear as perfect and as beautiful as if they had never been disjointed. However, this is a deception easily discovered. If the marks of restoration

are not visible, by striking the vase with your finger, it will, if it is perfect, vibrate like a bell, or a vessel of glass. If it has been restored, it will sound like a cracked vessel, and thus the cheat is discovered. But the former test is here as valid and inevitable as before. The same sponge will remove all the operation of the restorer, and expose those parts which are really the antique. As in the curious instance which occurred to Sir W. Hamilton, who, entertaining doubts with regard to the validity of certain drapery on a Silenus, which was represented in a Bacchanalian subject upon a vase he had purchased at Naples, exposed it to the test of the sponge, and the whole of the drapery disappeared. His words are these :—

“A vase in my first collection, in the British Museum, representing a Bacchanalian subject, was published by Passeri before it came into my possession, and whilst it made a part of the celebrated Mastrillo collection at Naples ; the learned antiquarian has displayed in his dissertation on that vase, much of his erudition to explain the reason why a Silenus was represented there completely clothed, and not naked as in most monuments of antiquity. When that vase came into my possession, having purchased the whole collection, I soon perceived that the drapery on the Silenus had been added with a pen and ink, as was the case with the figures of many other vases in the same collection ; the late possessor being very devout, and having caused all the nudities to be covered. However, as soon as the vase was mine, a sponge washed off at once both the modern drapery, and Passeri's learned dissertation.”*

“A circumstance that happened to me not long ago, may serve to illustrate the facility of discovering the validity of vases.

“I went from Naples, with a party of English friends, to visit the antiquities of Cuma. In our way we passed through Puzzoli, and were detained there a short time to procure the noted old Cicerone, Tobias. He soon made his appearance, with his red nightcap and bare feet, and brought with him a host of Lazzaroni, bearing baskets of broken lamps, bronzes, coins, and fragments of marble that had been found in the neighbourhood. Among them I discovered a fellow with a vase in his hand, of a form I had never seen before, but so covered with something they had stuck on in imitation of the ancient tartar, that I could not discern the nature of the design upon it. They had also had the address to break off the

* Vide Sir W. Hamilton's collection of Engravings from ancient vases, &c. page 10.

handles, and stick them on again with wax, that I might suppose it had been found so dismantled, and that they had since repaired it. The vase was of such magnitude, and so light in proportion to its size, and the value they set upon it so insignificant, that I was hesitating whether or not it was possible for them to make such a vase at the price they asked. My reverie was, however, not of any long continuance, for it was suddenly interrupted by a person, who addressed me in English, but betrayed at the same time the accent of a nation not a little remarkable for the swarm of impostors that emigrate from it. Oh ho ! said I, Paddy, what are you there ? and at once saw through the whole of the imposition. He was dressed in the habit of the Lazzaroni, and as much sun-burnt as the tawniest among them. ‘ Yes, your honour, I be here ; would your honour choose to bid for that vase ? its raly antic ; I saw it dug up myself near Monte Nuovo ; ’twas found, your honour, full of ashes and bones ; upon my shoul, your honour, there is some now in the vase.’

“ I own I indulged amazingly in this scene, and could not help humouring the deceit, till Paddy thought he had convinced me, *that vases were found in a soil recently formed by volcanoes, and that they contained the ashes of the dead* ; however, to his unspeakable mortification, I at length produced my sponge and my aquafortis, begging permission to wipe off a little of the external dust : when away went the tartar, and away went the figures, and away went the varnish, to the no small diversion of our party ; leaving only a poor, paltry, remnant of pale clay, which I returned to Paddy, for him to commence upon with a new display of his taste and chicanery.”

On the 30th of September, Lord Berwick communicated to Mr. Clarke the plan he had formed of a voyage to Egypt and the Holy Land, and offered to submit to him, if he approved of it, all the preparations for the journey. It will easily be imagined, with what delight such a proposal was received by him, and with what earnestness and anxiety he set about contriving and collecting all the means and instruments, which might contribute either to secure the accomplishment of their object, or to render it instructive and agreeable. For several weeks after the communication was made to him, his whole time and thoughts seem to have been occupied in this project, almost to the exclusion of those speculations which had engaged him so much before ; and to which even Vesuvius itself

scarcely formed an exception. About the middle of October, there is an interruption in his journal of sixteen days, caused, as he expressly records, by the labour and anxiety in which he was incessantly involved : and when his pen is resumed, it is chiefly occupied with the details of the steps successively adopted for the furtherance of their voyage, occasionally interspersed with expressions of prophetic fear and misgiving, lest the representations of some of their acquaintance at Naples should effect a change in Lord Berwick's intentions, and put an end to his hopes. But at that time, whatever opposition might have been contemplated or attempted, there was no appearance of its being likely to prevail. The preparations went on uninterruptedly, and the first of November was fixed for the commencement of their voyage. In the mean time, short as the interval was, he had so effectually exerted himself, with the aid of the full powers conferred upon him by Lord Berwick, that before the day arrived, every thing which depended upon himself, and had been confided to his care, was complete. He had collected all the books and maps which were either necessary or important to their views ; had agreed with a competent artist to accompany them ; and had actually engaged a vessel called the *Queen of Naples*, properly provisioned and equipped to convey them to Egypt, and afterward to await their future motions by sea.

On the 25th of Oct. he writes—"every thing goes on well for the tour to Egypt ;" and expresses a hope that they will be under sail in a few days.

On the 27th, Lord Berwick was presented to the king in the gardens of the *Favorita*, on his intended voyage ; and from that day to the middle of November, there is another blank in the journal, which is thus explained in it by himself.

"November, 1793.—Here I am, in the midst of the wildest mountains of the Tirol, with snow all around me, sitting in the common room of a post-house, at midnight, waiting for my courier, who is behind with a carriage broken down. When I reflect on my wayward fate, I can but smile. This day week, I left Naples for England, and have not once been in bed since two days before that time ; we had every thing ready to a *pin's point* to go to Egypt ; I had sent almost all my things on board, and expected to be under sail in twenty-four hours. Lord Berwick all at once recollected, that some living to which he is to present his brother, might fall vacant in his absence, and be given away from his family. He determined, therefore, to send an express to England, and when he had hired his courier, I offered to go too, that I might see no time was lost. Loaded with commissions from all the English at Naples, I set out on

Sunday last. I reached Rome the next morning ; parted with the cabriolet, and bought a carriage of Pio ; this detained me all day ; travelled all night, and in the morning of Wednesday arrived at Sienna ; baited there an hour or two, and travelled all day and all night again, arriving at Florence in the evening ; baited about two hours ; saw Lord P. and the two H.'s at l'Aigle Noir, an excellent inn ; arrived at Bologna about mid-day on Thursday, waited four hours to have something done to the carriage, travelled all night, and arrived at Mantua on Friday morning ; travelled day and night, and reached Trent by day-light on Saturday ; travelled on, and in the day the spring broke, which detained us near four hours at Nieumarch : set out in the dark, wind and rain incessant—all this in an open carriage ; arrived at Brixen by day-break on Sunday ; drank a little tea ; off again, and just before we reached Mitterwald, the carriage broke down. I set out, to lose no time, in order to get to Inspruck, and buy another by the time the broken one might be mended and brought on. My courier, Joseph, told me it was only two posts to Inspruck ; I rumbled on in a German wagon, with a surly swagger to this place ; when, finding, after two long posts, that Inspruck is still four posts off, and the night has set in, I employ the time I have to wait for Joseph, by scribbling in my journal. In this wild and remote part of the Alps, in a room full of drunken, noisy postillions, all bawling bad German, I feel myself just as much at home, and as comfortable, as I once used to do at the White Horse, in Fetter Lane, when I first went to College, where every thing seemed more strange to me than this droll scene does at this moment ; so much does a little wandering rub off that surprise one is accustomed to feel at new sights. My companions consist of a group of mountaineers, more eccentric than any Flemish painter ever drew ; they have been very busy in making one of the girls of the house drunk, and are now vastly amused to see her make a fool of herself, and to hear the old woman, her mother, scold. They have all on those caps of green plush and fur, and some of the whitest cotton, which one sees every where in these parts of the Tirol.

“It may be well, in the mean time, to say how the days passed, previous to my setting out on this expedition, since October 27.

“I was entirely engrossed by preparations for our eastern tour. I removed my bed to the Albergo Reale, and got every thing in readiness. The English, with Sir William and Lady Hamilton, were to have breakfasted on board with me, the morning on which I heard the news of this delay, and was obliged to put them off.

"On Wednesday, November 3, I went in Lady T.'s carriage to the king's chasse. We breakfasted with his majesty, who was very civil to us. The Prince of Kinski was there. Soon after ten o'clock, the chasse began, and a more beastly, bloody, brutal work, I never saw. The horsemen were divided into four troops, each distinguished by a uniform of gray and gold, and the different troops by a different coloured feather in their cap, and each one bearing a lance. These, commanded by the king, took their station on the four sides of a spacious field or plain of meadow land, round which were coppices and woods, containing wild boars, roebucks, foxes, hares, &c. The peasants, by shouting and firing guns, soon obliged a drove of these, consisting of a hog with a sow and three large pigs, to leave their shelter and enter the plain. Instantly, dogs half-famished were let loose upon them, and when the horsemen perceived the animals fastened upon some of them, they rode up and plunged a lance into their hides; twisting it round and tearing the bowels of these wretched animals. They then ordered one of their pedestrian attendants to transfix the animal to the ground with a spear, while they amused themselves by plunging stilettoes into his body, or cutting off the tail of the hog as a trophy. A more insipid or unmanly amusement I never saw. Yet the Princess of — used to attend these elegant slaughter works, and gloried in plunging her pointed lance in the gore of a poor hog.

"There were about sixteen hogs killed in all, which was reckoned wretched sport, as the number of swine usually massacred on this occasion generally amounts to fifty or one hundred. The only amusing part arose from the pursuit of the roebucks, foxes, &c., which generally afforded something like a chace. When these appear, the dogs are let loose upon them, but nobody rides after them; they are considered as affording so much inferior sport to the glorious pursuit of a pig. When the king was sufficiently fatigued, he rode up to us about four o'clock, and ordered us home to dinner with him and his courtiers. Lord P. joked with him a little on his favourite amusement, when the king, laughingly, told us: 'I know,' said he, 'you English think this a very savage kind of sport, but to tell you the truth, you must know I am naturally *poco sanguinario*, and so it suits my disposition.' We had a very magnificent dinner, and after coffee, Sir W. H. desired me to be ready below with the horse Lord B. intended to present to his majesty, and he would bring him to see it. The king came, admired the mare of all things, joked with me about my whiskers, asked me several questions about my voyage, and wondered why I should be so eager to undertake a

journey to Egypt. He then desired I would mount the mare, and I rode her round the ring where the races are held annually, at Carditelli, before his majesty and his whole court. They all were delighted with this present to their king, and we parted in the highest glee.

"Sir William H. made me acquainted with a plan of his to-day, while we were looking at the hunt, which the world is not yet acquainted with. He has been for sixteen years past engaged with a poor priest who lives at Resina, in keeping a journal of the daily revolutions observable on Vesuvius. These are to be represented by a series of drawings, which already amount to several volumes folio. He says he intends to publish them soon, and place the originals in the Royal Academy; that if any one hereafter, more young and more persevering than he is, chooses to carry it on upon a larger scale, they always may refer to them. Thus, I see a poor priest will be the author of this great work, as Talinski was of his book on Greek vases. Sir William does nothing towards the work except publishing it, and putting his name to it when it is finished. How easy it is for a man of fortune to be numbered with the literati! However, Sir William has this merit, certainly, and it is a very great one, that although he was not the matrix, in which the egg was generated, he was at least the sun that fostered and brought the embryo to light.

"Guutsberg, near Augsburg, November 20.—Our carriage, which I bought of Pio, and in which he cheated me most prodigiously, broke down for the third time, about half a post from Augsburg; we patched it up to hold to this place. What time we have lost with this cursed carriage! at least a day in all, if not eighteen hours. I should have been now at Mannheim. The cold I suffer in the night is very severe, and prevents me from enjoying the little sleep I should otherwise have in the carriage. Here I am now sitting in a little stinking room of the common post-house, where the girl of the room thought it a great theft to pilfer a sheet of letter paper out of my portfolio. I caught her in the fact; she let it fall in her fright, I picked it up, and gave her a quire with it; I believe she thinks I am mad, she stared so. A Jew teases me to give him eight ducats for a gold watch, and it looks very well; it is amazing how they could make up such things for that money. He speaks only German. There are Jews of all countries, all over the world.

"N. B. We got no farther than Brenor on Sunday night. Monday we reached Inspruck, and coming out of the town, I met Sir Gilbert Elliot, going to Toulon, stopping to change horses with his second carriage; a gentleman in it, I believe

his secretary, told me he came home to England from the West Indies in the Duke. By inquiry, I find my brother George was among the number on board, and that he is now in England.

Tuesday.—Breakfasted at Füesen, and reached Augsburg just as it grew dark; the Three Kings, quite a palace of an inn, but very dear. A Major L'Isle there attempted to get some money of me, but did not succeed; *the gudgeon would not take his bait*. His directions about my route I accepted of and thanked him, but would take none of his hints about lending him money, although he threw out some very broad ones; such as letters not being arrived—wanted just six louis d'ors, &c. &c. All would not do; but I promised to deliver a letter from him. The Lord knows who he is; if a gentleman, I ask his pardon sincerely.

"London, Warren's Hotel, Dec. 1, 1793.—From Guutzberg, I proceeded with all possible expedition to Ulm, where I dined and bought a pair of fur boots, and saw the funeral procession of an officer, with the sword and scabbard crossed upon his coffin, and all the soldiers with their arms reversed, drums muffled, &c. The next morning, November 21, I breakfasted at Constat, having travelled all night, and went on the whole day, through Ettingen, Bruchsal, &c., to Mannheim, where I arrived on the morning of the 22d having travelled all night on the 21st. I breakfasted and bought a pipe for Lord Berwick, which I left there against my return, and proceeded to Mayence; the roads, all the way cut up by the armies, were so bad, that I did not arrive before night. I wished to go by water to Coblenz, but they will not permit boats to pass during the night-time, and the roads were so dangerous, that I stopped the whole night at the Hotel de Mayence, an inn like a palace; in the morning I walked about and saw the ruins of the houses, churches, and palaces, that had suffered during the late siege. From the Dominican convent, I brought specimens of the effect of the fire; there were the bread, nails, glass, mortar, and stone, all mixed as if they had been in fusion together. The master of the inn gave me also some of the money of the siege, which the French had struck from the bells of the convents and churches. Between Mayence and Coblenz, I was overturned in the night; Joseph was under me, but neither of us was hurt. I reached Coblenz early in the morning, and immediately hired a boat for Cologne. An emigrant offered a horse for sale, which he had rode from the Prince de Condé's camp; horses sell for mere nothing, owing to the quantity the emigrants dispose of from necessity. Passed down the Rhine to Cologne; arrived late and stayed the night,

and part of the next day, for want of horses. Bought a piece of Monsieur Hardy's wax work, and some Cologne water. Overturned again between Cologne and Aix-la-Chapelle—fell down a bank—not hurt. At Aix the emigrants begging in the streets. Came from Aix through Juliers to Liege, and from thence to St. Tron where I slept, it rained so hard. Came on the next day to Bruxelles; saw Lord and Lady C. and Miss F. Went with them to the theatre; saw Mrs. L. and her lovely daughters: went home and drank tea with them. Left Bruxelles at midnight and came on to Ostend, through Ghent, Bruges, &c.; Ostend garrisoned by the English. Passed the night there at Morrison's hotel. Early in the morning went on board a packet for England. Left Ostend with a fair wind for England.

"We had been out of the harbour about three hours, when I perceived Captain Hammond very busy with his glass, looking out to sea, and talking to his mate with an appearance of great anxiety. I could overhear him say, '*She's a rogue, Tom, we had better sheer off!*' Presently we learned that a French privateer from Dunkirk was bearing down upon our broadside, with all the sail she could make. The captain advised to put about for Ostend, and we readily agreed; but finding that she still gained upon us in every tack, he proposed to make for the nearest port of the emperor's coast, and run the ship aground. Even this we soon found we could not attain. Our papers and despatches were all delivered up, with those of the king's messengers who were on board; and the mail and they were fastened to four 50lb. weights, ready to be thrown overboard, in case they should come alongside. Finding it impossible to escape, the captain proposed to put about, fire a lee gun, and run right at her. Every man had his musket and ammunition given him, all the guns were set, and we were quite ready for action. Some emigrants on board were terribly frightened, and Joseph, my courier, with difficulty prevented one of them from shooting himself. One of the king's messengers also took out his pistols, and declared he would die by his own hands sooner than be conducted to their dungeons a prisoner. For my part, I continued very cool, and pulling off my cloak, placed myself upon the stern with my musket ready to do the best I could for the defence of my life and liberty. Joseph did the same, and sat by me. We fired our lee gun at her forecastle; whether it did any mischief, or whether she was without guns, or whether she mistook a packet that now appeared in our stern for a king's cutter, I don't know; but within four minutes after our fire she put about and made off,

and thus ended a very unpleasant affair. I was landed at Dover, on the morning of November 30."

After spending two or three days in London, to execute the commissions with which he was intrusted, he proceeded for Shropshire, and arranged the principal business which had brought him to England. He then immediately set off on his return to London; and, travelling without rest, arrived at the hotel again, between eleven and twelve o'clock at night. "As soon as I arrived," he says, "fatigued and half worn out with all the exertion and care I had used on Lord Berwick's account, having caught a cold by the night air, and wishing for one night of peaceable repose, I hurried to my rooms, and found a letter from ——."

In this place, several pages of his journal are torn out; but from other documents it appears, that the letter in question was from Lord Berwick at Naples, and that the information contained in it, was nothing less than the sudden postponement, or in other words the abandonment, of that voyage, on which he had now so long and so fondly reckoned; and for the sole purpose of facilitating which, his rapid journey to England had been made.

It would require a very intimate knowledge of the sanguine character of Mr. Clarke, and of his passionate desire for seeing Egypt and Greece, to appreciate adequately the effect of this communication on his mind; but it may suffice to say, that the disappointment was felt by him more bitterly than any which he had ever before experienced in his life; that for many years it was ever breaking out in his letters and conversation, and that it could never be said to be entirely overcome till under other auspices, and at a maturer age, he had been permitted to drink freely of that cup which was at this time unexpectedly dashed from his lips. It was not only the failure of a favourite project which he had to regret, though that was grievous enough, but there was a strong impression upon his mind, that the change had been brought about unhandsomely or maliciously, by some persons at Naples, who, from views of their own, had opposed the expedition from the beginning; and who finding other means ineffectual, had taken advantage of his absence to poison the mind of his friend against himself. At all events, it was evident that a considerable burden of labour and anxiety had been thrown upon him, without due consideration; and, as matters turned out, without any object or advantage whatsoever. But, whatever ground there might have been either for his complaint or suspicion, it is honour-

able to him to state, that every allusion to the names of these persons, and indeed every strong expression of his disappointment, was afterward carefully erased from his journal with his own hand ; and that the only record which now stands in its pages, relative to this part of his engagement, is a handsome acknowledgment of Lord Berwick's liberality to him when their connexion was dissolved.

For the next three weeks, Mr. Clarke remained in London, preparing leisurely for his return to Naples, and gravely engaged in an occupation, termed by himself the least enviable in the world, and it may be added, from the way in which it is often set about, the least profitable too ; namely, that of dissipating his cares. He complains that his mind was uneasy, his spirits depressed, and that he was altogether unfit to do any thing as he ought to do ; and having found some of his old friends in town, he endeavoured to drown the sense of his disappointment in their society.

During the latter part of this short residence in England, and about the end of December, at the pressing instance of his old friend the Bishop of Gloucester, he paid a visit to Jesus College, Cambridge ; induced chiefly by the propriety suggested to him of presenting himself to the master and fellows, and of keeping alive his interest, with a view to a future vacancy in the fellowships ; but not without a hope of meeting in those well-known scenes some of the companions of his earlier years. But the visit, which seems to have been paid with some reluctance, was productive of little else but disappointment and regret : for whatever remote advantage he might hope to derive from it, with regard to his prospect of a fellowship, he was much more alive to the utter failure of his immediate expectations with respect to the society : the time which had elapsed since he had quitted Jesus College as a residence, was now about four years ; a period quite sufficient to have removed all the persons about whom he was interested, but not enough to deaden the strength of his own feelings, or to lead him to calculate on such a change : and his, it will be remembered, was a character much more likely to feel keenly the disappointment, than to reason coldly upon its cause. Under these circumstances of his visit, the reader will be more amused than surprised at the following extract from a letter to a college friend ; which, however highly coloured by his own enthusiastic spirit, and distinguished by circumstances peculiar to himself, cannot fail of presenting to the mind of every one who has been placed in similar circumstances, a resemblance more or less striking of something he himself has felt.

HOOF INN, CAMBRIDGE, Jan. 2, 1794.

"*Brutus, thou sleepest! awake!*—What has caused such an alteration; that I, who am running half the world over, distracted with a million of uninteresting occupations, can find time to write to an old friend, while he, dozing in retirement, neglects to kill one hour of solitude by paying me the tribute of a short reply? I have epistolized thee in half the countries of the globe—dost thou live, and shall I never hear from thee?

"You are surprised to find me here. So am I. I can't tell a rignmarole tale of my adventures. I *was* going to Egypt three weeks ago; I *am* now going to Naples, and there's the difference. Perhaps I shall be here again in the spring. Our tour to the East is postponed, and if it is quite given up I shall take my leave of his Lordship, and withdraw to my native land again. I came to England on the wings of the wind. I shall return to Italy more deliberately. My business here was to arrange matters for the better progress of our Levantine scheme. Lord Berwick has written to say he has postponed it for a time, I fear for ever; and if so, I return to England again. But how came I at Cambridge? Why, the Bishop of Gloucester sent me here; for what purpose I can hardly say; but I believe to mortify me, by showing me the changes that have taken place since my absence. You have been here, they say, and have beheld a divided people; a College gone to the dogs; old friends with new faces; and a host of strange quizzes all at loggerheads together. Why did I come here? Instead of meeting my old companions; instead of being welcomed by those I left behind, what is here? People I never wish to see, and who do not wish to see me. I have been here forty-eight hours, and twelve more shall find me many a mile off.

"It was near dark when I arrived. Not a light in any of the rooms. Not one cheerful sound—not one friendly welcome. Some pestilence I thought must have destroyed them all. I walked in the cloisters—nothing to be heard but the sound of my own footsteps. I strolled into the ante-chapel—a simple monument of white marble caught my eyes, which reflected the scattered rays of the sexton's candle. It was to the memory of our poor friend William Beadon. At last the horrid clang of a dismal bell called a few straggling sinners from their cells to chapel. I addressed a yawning freshman, and inquired after a few of those I hoped might still exist among the living. 'O. jun'. sir! is gone to dine with Dr. T.' 'O. jun'.!!!' said I, giving a spring that alarmed him, 'is it possible that he can be in the University? Who the devil is Dr. T.' An odd place, thought I, for him to dine at; but

away I ran full of the idea of seeing you ; and just as I cleared the college gates, a tall figure in black came towards me. I could have sworn it was you ; so, seizing the poor fellow by both his arms, I pinned him with his back against the wall, when, by the dim light of an opposite lamp, who should stare me full in the face, but that pale miscreant G. the attorney ! I was ready to kick him for disappointment. At last I got to Dr. T.'s. 'Is Mr. O. jun^r. here?' 'Yes.' I hid behind the door—"tell him to come out." Out he came, but not the O. jun^r. I expected to see, but a different person, whom I had never before seen."

Mr. Clarke returned to London on the 3d of January, 1794 ; and the preparations for his return being completed, he set off for the Continent on the 20th of the same month, having first paid a short visit to his mother and sister at Uckfield, and to his friends in that neighbourhood. For the account of this journey, the reader will be again referred to his journal and the letters.

"January 20th, 1794.—Left London. Arrived at Dartford at seven, the roads being very heavy. I had in company Mr. M. a young man of nineteen, brother to the person whose carriage I am to convey to Naples. Going out of Dartford, very little before we came to the turnpike, we were stopped by five footpads, all armed. At first, I attempted to fire, but finding such a number against us, I thought it prudent to desist, having only one small pocket-pistol loaded, which might miss, and then I had ten or twelve horse-pistols against me, every villain carrying his brace. Two of them seized our two postillions, threatening to murder them if they looked back. The others attacked us in the carriage, and with cocked pistols to our breasts, making use of dreadful imprecations by way of bravado, demanded our money, our watches, and pocket-books. From poor Sani, my courier, they took his favourite and excellent old watch ; from Mr. M. his watch, pocket-book, and twenty guineas in cash. I gave them only six or seven guineas, out of some money I had in my waistcoat pocket, and threw my watch and my pocket-book, in which was near 100*l*. in notes, under my feet. The villains searched and examined the bottom of the carriage ; and one in particular, who had forced himself in, did, I believe, put his hand upon them, but through his agitation did not perceive them. When they had finished, they made off, and as they left us, said to somebody, '*Go on, John !*' which made me think our postillions were in the secret. However their names were Frank and Thomas, but it was as likely that they said *Tom* as *John*, the confusion preventing

me from hearing distinctly. I have since wished I had fired, but what could one pistol do against so many? Sani had the other pocket-pistol loaded behind him, in the holster, which he could not use, as when the door was opened, he was obliged to conceal it from the footpads with his back. When the villain got into the carriage, I could easily have despatched him with the one I had, but it is most likely the other four would have despatched me. We slept that night at Sittingbourne."

Extracts from two letters to his mother and sister.

"OSTEND, January 24, 1794.

"My dear mother and sister.—We arrived yesterday morning. We have now just finished our breakfast, and to give you an idea of the immediate difference between my beloved country and the Continent, I'll tell you what our conversation was over our tea.—'Well, Mackinnon, good morning! thank God, I had a decent bed, and slept well.' '*Had you? by the Laird,*' replied my little Scotchman, a native of the northernmost point of the Western Hebrides, '*I wish I cud say as much for mine ain self!*' 'Why what was the matter? was the bed damp?' —'*Nay, the bid was wall enoof, for that matter, but I found three lairge leece upon the pellow.*' 'For Heaven's sake don't tell me of it till after breakfast!' 'Oy, but 'tis true enoof, for I pecked 'em oof with my ain honds, and there they are noo in the —!!' This was too much; I rose from the table to take a walk, having had more breakfast than I desired; and felt quite convinced, that if such craters as leece were to be found, a Scotchman wud disarm them mooch sunner than ony other paraon!

"Our waiter is a black; one of your true Mangos, look at him!—(*Here is a sketch of the man's face,*)—a most tropical nigerity of expression! He talks to me of the wars, and at this moment, if you attend to him, he is relating to me the siege of Valenciennes. He professes himself to be a friend of the Duke of York's; has, with his own hands, set fire to above five hundred villages, and so forth—*Vivent les gens de soleil.*

"To-night I shall go to sleep, for an hour, over a French opera; performed by some descendants, I believe, of the Uckfield strollers: they are much such a crew. To-morrow, I go to Ghent; the day after to Brussels. Then to Liege, Tirlemont, Aix-la-Chapelle, Cologne, and so on up the Rhine."

"COLOGNE, February 1, 1794.

"My dear mother and sister.—Come, take a chair on each side of this little green table, and enjoy the beautiful scenery I have now before me. 'Tis only to rouse your fancy. See what a lovely sight! Not a cloud in the sky. The Rhine full before us, rich with accumulated waters from the melting snows, rolls his vast tide along! See what innumerable vessels are floating upon his surface! Look how commerce spreads her canvass to the winds! What a throng upon the quay! How busy they look, not one idle being among a thousand! See what the ingenuity of man is capable of performing, who, finding the rapidity of the tide too great to admit a bridge of arches, has converted even its violence to utility, in forming a flying bridge of boats, which owe all their convenience to the force of the stream!

"We will shut the windows, and draw round the stove; the air is keen. I have hired a large boat, and am to be carried up the river. We embark to-morrow. It is to be drawn by horses. I shall, by this means, avoid roads almost impassable, and perhaps another overturn. I mean to go, in this manner, as far as Mayence, and if I can to Mannheim; but the French are encamped so much on both sides, that I fear I must give them the slip by going to Francfort."

Extracts from his Journal.

"February 2, 1794.—Having got all our baggage on board over night, we rose at six this morning, to proceed in a covered boat up the Rhine. The weather the most delightful that can be conceived. We had a stove on board, so that we breakfasted, dined, and drank tea, in great comfort, amusing ourselves with the English papers. There is nothing worth seeing on the banks of the Rhine from Cologne, until you get to Bonn. The river itself is broad and fine, but the country is bleak and melancholy, very flat, and without any other ornament than a few stunted willows, such as you see by the side of water in all low countries. The view improves very fast as soon as you leave Bonn.

"February 3.—Rose at five o'clock; breakfasted very comfortably in our boat. The views on each side growing very fine. In particular, we passed under the noble ruins of a castle they called Anvert, on the left hand. Soon after, another almost as picturesque, though not so striking and so lofty, ap-

peared on the right. A little island soon after made its appearance, and the retrospect of these three objects combined, formed the finest scene imaginable. The clear silver light of the morning, contrasted with the bold outlines of the ruins, and the indistinct masses of rocks, covered with trees and vineyards, from the water's brink to the mountain's brow, were excessively beautiful. To these were added the smooth surface of the water below, the white cottages of the villages upon its edge, with their spires peeping one above another, and the little island spread in the front of the whole with its trees and churches. Slept at Andernach.

"February 4.—Rose at six; breakfasted in the boat. The Rhine has no particular beauties from Andernach, until you come to Coblenz. Then the castle which has been so often compared to Gibraltar, makes its appearance, and nothing can be more grand, just at the conflux of the Rhine and the Moselle. From the top of the castle you may distinctly perceive the different colours of the two rivers, which seem as if jealous of each other and refuse to unite.

"February 5.—We continued to proceed up the Rhine, in the most delightful manner imaginable. Nothing was wanting, but more interesting society, to render it the most agreeable voyage of my life. Never was weather more favourable, or scenery more sublime. All the way from Coblenz, we had the greatest variety of objects, and these combined and thrown into such views, as made them quite enchanting. No part of the Rhine is ever equal to the views between Coblenz and Mayence. The mountain scenery continues from Coblenz until you come to Bingen, and then the mountains gradually disappear, and present in their place, a flat open country, in which the Rhine flows broad and important enough, but never accompanied with the imposing and majestic scenery below Bingen. We had a small stove in the boat, upon which we dressed our dinners, heated our kettle, and toasted our rolls. Indeed, accustomed as one is to expect little *désagrémens* upon water excursions, I had never reason to be more satisfied. A warm, covered boat, with a clean room, and a good fire, hot rolls, chocolate, tea, rum, milk, and eggs, beef steaks, old hock, and the English newspapers, were a collection of luxuries, that one would hardly expect in going up the Rhine, where the magnificence of the scenery is alone a gratification sufficiently satisfactory for the little trouble the voyage requires.

"We slept the first night after leaving Coblenz at a fortified town, situated among the most romantic and striking objects of all the views upon the Rhine. An old German soldier came to take our names, country, and intentions, to the com-

mandant ; he had served in America, and gratified our patriotism, by addressing us in English.

“Feb. 6.—Continued our passage up the Rhine, winding through vineyards and among vast rocks of slate. These mountains which form the banks of the Rhine, and through which the river flows, as if they had agreed to divide and form a bed for its waves, are cultivated in the most extraordinary manner, from their very tops to the water’s edge. The whole country, bordering on the river, is covered with grapes. Wherever the rugged and fantastic form of the rocks permits the approach of a human footstep, they have planted grapes, and indeed in some places the neatest little vineyards appear where it seems impossible for any one to tread, or for any cultivation to take place.

“The changes that constantly take place in the scenery as you proceed, are like the variations in a theatre. New objects rapidly succeed each other. You scarcely lose sight of a village or a fortress, ere some old ruin, town, or castle makes its immediate appearance ; and so quick is this alteration in the scenery around you, that not being able to enjoy sufficiently any one object, you pass by them all with regret. It seems as if one was passing from one lake into another, since at every turn, the water appears completely land-locked. Slept at a village beyond Bingen.

“February 7, 1794.—The approach to Mayence is very grand. That noble bridge of boats cuts a fine appearance across so broad a river. We arrived about three o’clock. Discharged our boat. The Hotel de Mayence is a very large inn, and a very good one. The accommodations are clean, and their famous wine of Johannisburg is alone worth coming for. This is from vineyards more famous than those of Hocheim. I found it uncommonly strong, and full twice as intoxicating as Rhenish in general, which is the smallest recommendation it has.

“February 8, 1794.—I walked this morning in the square, which at present is perfectly the place d’armes—officers, soldiers, French prisoners, cannons, baggage-wagons, powder-carts,—all war. If the French should again visit Mayence, I believe they will meet with a warmer reception than they had before. One thousand men are reviewed on parade every morning at ten o’clock. The effects of the late siege are becoming every day less visible. A stranger would not discern that Mayence had ever suffered from a bombardment. Among the soldiers I observed several with gold and silver medals round their necks, the badges of honour for valour and exploits.

They were chiefly of the regiment of Prince Henry of Prussia, uncle of the present king, and brother of Frederic the Great.

"It remains I should say a few words of the people *du bas Rhin*. For my own part, I like them better than any of their neighbours. They are a hardy, industrious, clean, open-hearted, rude, but honest race of men. They are neither Flemish, Dutch, nor German. If I were to give my opinion exactly, they are a compound of all three. They have the cleanliness of the Dutch, and use as much tobacco. They have the hardy, rude outside of the Germans, with the dress, features, and manners of the Flemish. From being constantly accustomed to hard labour upon the water, they become sturdy and industrious. They unite very much in family interests, and you seldom see a party of labourers, or a set of boatmen, but two out of five will be brothers; and often one sees father, sons, and daughters, all at work at the same bench of oars, as was the case with me when I went down the Rhine in November. The women are, without exception, strong and ugly. I never saw a pretty face among them. They pay great attention to the duties enjoined by their religion. They are fond of national songs, and generally delight in hearing mendicant performers on a small harp, which they accompany with their voice. I listened with great attention to several of their songs. They were very characteristic of the people, and generally consisted of the delights of drinking good wine, in a *warm simmer*, as they call their little rooms, when heated almost to suffocation by a stove. Low ribaldry finds a large share in their songs. Indeed, when one considers the similarity of language, and of many customs still prevalent in these countries, one can but be struck with the great analogy there is between the present Germans and the English in their days of yore. The use of wooden shoes is common both to men and women.

"February 9.—We received intelligence that a very powerful army of the French are advancing rapidly towards Mannheim and Worms. This impedes my progress that way; however, as the accounts are very vague, I shall go to Francfort, and decide upon my route, after I have consulted with the bankers there.

"It is impossible to help remarking the want of eyebrows among the Germans. They have either none at all, or they are so light, that the face loses the chief feature of expression; and thence it is, that Germans have universally, or at least with few exceptions, a stupid vacant physiognomy."

to states alone ; among the Italians, it subsists often in the same town, where a river, or a bridge, or a difference of parish, occasions the most implacable animosity between the parties, and often a distinction in manners and dialect, as well as features. At Rome, the Transtiberini, or those who inhabit that part of the city behind St. Peter's, will not suffer their children to intermarry with the *popolani*, as they call all those in the vicinity of the Porta del Popolo. They consider themselves as of a superior race, and the only descendants of the ancient Romans. They are hardier, more industrious, and possessed of a greater degree of strength. They pretend that one of the Transtiberini is at any time able to combat with at least three of the other inhabitants of the city. Nay, to such excess do they carry their pride and animosity, that they will sometimes fight as soon as they meet, and especially when inflamed by the potent fumes of their *orvieto*. At Florence, the different parishes form distinct and separate bodies of men ; that of San Lorenzo, being the largest, considers itself of the greatest consequence, and every individual of it piques himself upon his local importance. When the Grand Duke abolished the galleys, and adopted in their stead that edifice at Pisa, called *Il Bagno*, for the reception of the slaves, the parish of San Nicolas happened to be the first that furnished a convict to inhabit it, upon which account the rest of the parishes have always considered the people of San Nicolas as the most contemptible of all the Florentines. They do not like to associate with them, nor on any account will they permit their children to form connexion among them. If such an affair should happen, the person, whoever he is, that weds a girl of San Nicolas, is upbraided with his violation of the ancient animosity, and the old story of *Il Bagno* is immediately revived.

"At Naples, these local distinctions are still more remarkable. What can be more striking than the wonderful difference between the Lazzaroni and the rest of the Neapolitans? Yet even this is not all ; even these Lazzaroni are again divided, and the inhabitants of St. Lucia differ as widely from the Lazzaroni of the Mole Piccola, and Il Ponte dellá Madonna, as they in their turn differ from each other. Add to all this, the extraordinary difference throughout all the districts and petty divisions of the kingdom of the two Sicilies. The inhabitants bordering on the metropolis have all their different distinctions, and are marked by separate modes of dress. How various are these costumes. The people of the Campagna Felice have their particular habit ; the people of Capri, Ischia, Procida, have theirs ; the inhabitants of Pozzuoli, Sorrento, &c. have theirs. And, what is of all things

the most singular, the women of Posilippo, a small part of the town of Naples, are distinguished by a headdress, and a habit perfectly distinct from the rest of their fellow-citizens. Thus it is that the variety in the costume of these parts is so extended, that the painters of Naples sell to strangers a collection of different modes of dress, each peculiar to some particular district of the Neapolitan dominions.

"How singular is the ceremony of marriage in the province of Isernia! There, when a young man wishes to pay his addresses to the woman he loves, he must first obtain permission by the following curious mode, which is called *la Cipponata*. He makes up a bough with all the ornaments of flowers, ribands, &c. which they call *Il Cipponi*; and the larger this bough is, the stronger the proof of his attachment. In the night he places it at her father's door, and retiring to some convenient distance, with his musket in his hand, and his poniard in his bosom, watches it till the morning dawns, and wo betide the presumptuous mortal that shall dare to meddle with or remove the pledge of his affection. In the morning the *Cipponi* is discovered. The father comes to the door, and with a loud voice demands, '*Chi ha cipponato la figlia mia?*' The lover then elopes from his hiding place; declares his passion, and begs permission to pay his addresses in form; saying in answer, '*Lagio i, ciponato io!*' If the parents approve of the match, he is immediately admitted; if not, the father says, '*Agi pazienza, figlio mio! O sangue mio colo tuo, non si confai!*' [N. B. This is written as it is pronounced, with the Patois.] and without farther ceremony the lover retires, patiently bearing his disappointment, nor ever again exerting his influence to produce an alteration in the sentiments of the relations. Should he succeed, and be admitted to an interview, the day is soon fixed for the nuptials. On that morning the bridegroom first repairs to the church, and may be seen for some hours before his bride arrives, walking impatiently beneath the arcades, and looking every moment to see if his beloved is upon the march. At last she appears. He flies to meet her, and thus addresses her: '*Ben venuta, madama! ben torata!*' She replies, '*Torata sono et torata mi poi chiamare!*'

Instead of considering the people of Italy as the inhabitants of one country, all actuated by a similarity of modes and caprice, and possessing the same manners, dialect, and laws, there is no portion of territory upon the whole face of the globe, where in an equal extent is found so great a variety of laws, government, manners, dialect, features, dress, and customs. A few miles create in Italy as great a change as one

finds in Europe, upon leaving one nation for another infinitely more remote. The borders of the Rhine and the Ganges do not present a wider contrast than those of the Arno and the Tiber; so striking is the distinction between a Florentine and a Roman. The same remarkable difference is found in all the other states of Italy; Genoa, Turin, Milan, Venice, Florence, Rome, and Naples, have all a people peculiar to themselves, and marked with various degrees of dissimilarity. Each of these are moreover infinitely subdivided; nor does a stranger, in the towns of Italy, pass from one street into another without perceiving some alteration in the people that inhabit them."

The narrative of his journey is thus continued :

"Came from Cierla, through Inspruck to Steinach. The situation of Inspruck is the most beautiful of any in the Tirol, and it is viewed to advantage from the mountains as you descend in coming from Italy. It brings strongly to one's recollection Dr. Johnson's beautiful description of the vale of Abyssinia. High mountains rise from it on all sides perpendicular, and the wolf, as he ranges their hoary tops, looks down without dismay upon the crowded streets of the town. The river Inn meanders through it, and a long extent of valley makes the scene enchanting. There are good inns, and very clean, all through the Tirol.

"February 22, 1794.—Came from Steinach to Brixen, through a fine romantic country. Saw there a cabinet of natural history, extensive, and full of trash. Breakfasted at Brennor, the highest part of the Tirol; after which we continually descend towards Italy, as usual, by a river, which takes its source there. It is called the Eisac, and falls into the Adige at Bolzano.

"Feb. 23.—Came from Brixen to Branzol. The carnival every where prohibited, on account of the French troubles, and the death of the late king of France. At Colmar, we breakfasted; I believe there is hardly any where a cleaner, or a better inn. The scenery very fine; narrow valleys along the torrent; bold rocks and precipices, over whose brinks are seen convents, hermitages, and monasteries. At Bolzano, the people were amusing themselves with firing bullets at a mark. Perceived our vicinity to Italy the moment we arrived at Branzol, by the horrid stench of our room, and the miserable, tattered furniture of our beds. To complete the disgust, an Englishman had penciled the wall with a history of the bugs he had found in the very room we were in. We left Branzol very early, came through Naimarch, Salurn, and Lavis, to Trent. They begin to speak Italian at Branzol, and one gra-

dually loses German modes, dress, and language, till you come to Trent. The inn at Trent is good. From Trent I proceeded into Italy, by a new route to Venice. It is much shorter than the road by Verona, more curious, and better kept. Except one stage from Premulan to Bassano, it is excellent. We came from Trent to Pengine, Borgo di Valsugaro, and to Premulan, where we slept: the accommodations execrable. Left Premulan at two o'clock the next morning; came through Bassano, Castel-Franca, and Treviso, to Mestre, where we hired a boat for Venice. The road from Premulan to Bassano contains in a high degree all those sublime objects which are ever attendant on Alpinescenery. Part of it seemed like an epitome of the passage by the St. Gothard. Just before you arrive at Bassano, you leave the Alps entirely, and looking back may see them at one view in a line, as when you enter the Tirol, at Friesen, from Suabia. The country is quite flat afterwards, and as you approach nearer to Venice is highly cultivated. At Bassano, we breakfasted, a mob assembled with as much eager curiosity to see our carriage, as when I passed the St. Gothard. Castel-Franca is a small town full of poor wretches lounging in the long Italian manteau. At Treviso I saw the first appearance of the grand carnival, a number of people walking about in masks, and some only with large noses. I should have noticed the mode in which they celebrated the approach of spring at Premulan. Some men paraded up and down the village, beating a warming-pan and the top of a porridge-pot, singing, *'that the power of winter is gone, and we may soon go about half naked, without shoes and stockings, viva! viva!'* The road from Treviso to Mestre is full as fine as the broad high turnpike leading into London. The vines on each side are cultivated in festoons, and a variety of fantastic forms. The villas of Venetian noblesse with their gardens, parterres, covered walks, statues, &c., abound all the way.

"They were so awkward, and so long in embarking our carriage, that we did not reach Venice before midnight. We came to Pedrillo's, an excellent inn, on the grand canal, near the Rialto. There never was a place I have been so desirous of seeing as Venice, and I find it in every respect answer my expectations. We had the good luck to arrive during the last days of the grand carnival, which are always the most magnificent. I do not know how dull Venice might grow during a long residence, but, I am sure, to a stranger, upon his first arrival, it presents one of the most singular spectacles of any city in Europe. Canals instead of streets, gondolas instead of carriages, form scenes so new, that they must be interesting.

Add to this, the infinity of invaluable pictures, by the first masters of the Venetian school, the superb edifices of those celebrated architects, Palladio, Sansavero, Scamozzi, &c. The public entertainments, the riches, the government, all are striking."

"February 27.—At Venice you have no occasion for a laquais de louage. The Gondoliers are accustomed to act that part, and they are well adapted for such an office. Went in our gondola to the Place di St. Marco: saw a collection of figures in wax, representing the most celebrated men of antiquity, Plato, Aristotle, Cicero, Scipio Africanus, &c. &c.; also the judgment of Solomon, taken from a picture of Raphael's at Rome. They were astonishingly well executed. I never saw any so good before. The King of Naples was so like the original, that it made one start. Of all other groupes, the best was the artist himself at work, with his wife, and the servant holding the candle. Saw a collection of wild beasts. We then went to the top of the tower, from whence you have a view of all this princely city, the sea, the opposite shores, &c. From the tower we went to hire a box near the Doge, to see the spectacles; they asked three sequins, I would not give it, but went to the palace, and hired one in the window of the council-chamber for one sequin. We then saw the palace, which is full of fine pictures. From the palace I went to walk in the grand place, where there was a promenade, and all the world in masquerade. This seems very ridiculous to a stranger, as most of them take no pains to disguise themselves, except by wearing a nose; and you see them talking politics, transacting business, &c., with all the gravity in the world, considering their mask, or their paper nose, as nothing more than a fashionable appendage to their dress.

"About two o'clock, we went to take our places, and the spectacles began. The throng of people was beyond anything I ever saw. I think it exceeding even the benediction at Rome. First of all came a procession of butchers, with oxen. These were placed opposite the Doge, and the trial was to see who could strike off the heads of these poor animals at one blow, with an enormous sabre. Some of them succeeded. The next thing was an exertion of strength, which they call 'The force of Hercules.' It consisted of a pyramid of men formed upon one another's shoulders. The base was made of sixteen, which rose diminishing to one, and on his shoulders stood a little boy, who formed the point. There were two stages of these pyramids. After this came the most astonishing feat it is possible to conceive. A man ascended by a rope from the Place di St. Marco up to the top of the tower, and

from thence down on the other side, with a nosegay in his hand, which he presented to the Doge. From thence he mounted again to the tower, and then down again with astonishing velocity to the spot from which he originally started. They say there never was but one accident remembered in Venice from this feat, and that arose from the man's attempting to play tricks, when he fell down and was dashed to atoms. Since that time, it is forbidden to attempt any thing more than the common mode of going up and down. However, this made me shudder; for the man chose to amuse the populace, by twisting round and round the rope, and once he stuck so that I expected to see him come down upon the heads of the people. There was, besides this, a representation of gladiators, which was neatly done, but had little effect. The pyramids were repeated six or seven times, and at last the whole closed with a grand display of fireworks, but they chose to let them off by day-light, so that all their beauty was entirely lost. After all this, I went to see some excellent rope-dancing, where there was the best clown I ever saw: there was also very good tumbling, and a pantomime well conducted. I then came home to tea, and at ten o'clock we went in our gondola to the opera, at il Teatro San Benedetto. It was *Nina*; Madame Bruni, the first singer. The ballets were not extraordinary. In the middle of the second act, a shower of sonnets, with pigeons, turkeys, and fowls, were thrown through the ventilator into the parterre. They were intended as a compliment to Madame Bruni, and the first male singer, Signor Viganoni. The audience were chiefly masked. It did not finish before four o'clock in the morning of February 28, 1794; at which hour I came home, and am employed

In noting, ere they fade away,
The little lines of yesterday.

Under the name of a republic, and boasting of its liberties, there is not in Europe a more despotic government than that of Venice.

"We went all over the arsenal. They call it the finest in Europe. This is not true; once, perhaps, it was so, but those days are gone. The armoury is, I believe, longer than that in the Tower: it is in several rooms. There are arms for 80,000 men, all ready at a moment's notice. The ships are all built under cover. We saw the tawdry heavy vessels, in which the Doge goes to wed the Adriatic; all covered with gold, and as long as an eighty-gun ship. The model room was pretty enough. The whole of the arsenal is two Italian miles and a half round; two thousand five hundred men work in it daily.

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It seems poor and naked when compared to Portsmouth or Plymouth. From the arsenal we went to the church of San Giorgio Maggiore, and saw there some architecture of the famous Palladio, of which Venice is full. He built the Rialto. They showed us a noble picture by Paul Veronese ; the marriage at Cana in Galilee. In it were portraits of all the most celebrated Venetian painters. Paul himself, Titian, Tintoretti, Bassano, &c. &c. Walked in the Place di St. Marco, and saw the church of that name ; a Gothic edifice, of great antiquity, the inside of which is covered with Mosaic paintings. Intrigue is carried to such a pitch in Venice, that the gondolas are formed, and furnished with every convenience for that purpose. It is usual, in Venice, to see a lady with her cecisbeo in one box, and in the other her husband with his mistress ; and you will see the lady leaning over to compliment her husband's mistress, while he is bowing to the cecisbeo.

"In the evening, we went to the noblest and the neatest theatre I ever saw. The scenery was beyond any thing excellent ; by Mauri ; a celebrated artist. The last ballet was very fine. The women of Venice are, generally speaking, all handsome. They dress better, the men look cleaner, and every thing seems upon a better footing than either at Rome or Naples, where the women are all ugly, vulgar, and dirty ; and the noblesse look like a party of strolling players.

"The Rialto, of which so much has been said, is, in my opinion, very little deserving of its fame. It was built by Palladio, is of unpolished marble, consists of one arch, and is loaded with houses, having three streets passing over it parallel to each other. The bridge of Pont y Pridd, in South Wales, is in every respect superior, which was built by a common mason of Glamorganshire.

"There were eight theatres open while we were here. They were nevertheless all full every night. The oath of the Venetians is always a bloody one : *sangue di Dio, sangue di Cristo, sangue di Madonna*, are the usual expressions. The oaths of Italy vary in every state. At Rome, they are the most shocking of all. There you will see a postillion, or one of the lower class, when in a passion, fall down upon his knees, and blaspheme against heaven, the angels, the saints, and the virgin. A Russian gentleman was once in a post-chaise when a Roman postillion's hat blew off and fell in the river. The fellow coolly descended from his horses, and instead of trying to get it out, fell on his knees by the side of the river, saying, '*Managio a tutti Cristo, a Virgine Maria ! Oh anima mia, managio a tutti di paradiso et tre milia torno !*' 'But, my friend,' said the gentleman, 'what makes you conclude your imprecation with *tre*

milia torno? The fellow replied, while every limb of him was convulsed with passion, *‘Perche sapete, excellenza, che ogni santo, in questo bell’ giorno, e andato a camminare, voglio prendere tutti!’* At Naples, the oaths are more moderate, at least to English ears. The worst they make use of, in their own opinion, is when they blaspheme St. Januarius. It is then that a Neapolitan despairs of ever obtaining absolution, as the priests, making use of every method that may serve to support the holy fraud, endeavour to impress the minds of their votaries, with the most perfect abhorrence of any violation of the honour of their patron.

“During the carnival, it is usual for every person to enter the theatre masked. Soon after, they generally take them off, and the men stick them in the corners of their hats.

“Speaking of oaths—Four Neapolitan monks once engaged with a vetturino to conduct them to Naples, but made it an article of their contract, that he should not make use of an oath the whole way. Coming into a deep sandy road, he began to flog his mules and grunt and scold, but all to no use. *‘Eh vedete, signor,’* said he to the monks, *‘vedete! il mulo non vuo’ andar. Se non volete restare cosi, lasciate mi fare una sola!’* ‘By no means,’ said the monks, ‘whip ’em!’ However, at last, finding they were likely to remain there all day, and being worried with his entreaties, they limited him to a single oath. *‘Grazia, padre mio! managio il primo di Novembre!’* The cunning rascal chose to damn the first of November, of all other days, because it was consecrated to all saints; and by this means he thought in one comprehensive oath to be of as much service, as if he had been allowed to swear during the whole journey.”

“March 1, 1794.—Went in our gondola to the little island of Murano, lying off Venice. Nothing could be more pleasing than the view opening to the sea, as we passed under the bridge at the end of the canal di Mendicanti, to go towards the island; the Alps rising to the right with their white tops, the sea covered with gondolas and little skiffs, while every object was softened by the silver mist peculiar to Italy. Our object was to see the glass manufactories, but, it being Saturday, very few were at work, and those who were employed were only making window glass. We then saw the three palaces of Pisani, Barbarigo, and Palazzo Farsetti. In the first was rich furniture, and a fine picture by Paul Veronese. In the second a number of Titian’s works, who lived in this house four years, and died there. We saw the last picture he ever painted, which he did not live to finish, St. Sebastian; it hangs in the very room where he died. All the parlours are paved with

schiola. We then saw the church of St. Giovanni e Paolo, famous for a picture of the martyrdom of St. Peter. Venice is famous for its gold workmanship, velvets, wax, glass, combs, &c.

"In the evening I went first to the theatre of St. Cassano. The ballet was fine, a Madame Ballon danced with great spirit and much grace. From thence I went to St. Samuelli. To describe what I saw there is impossible. The coup d'œil was beyond expression. I found a crowded audience of very genteel people, in a theatre of the most splendid description. The boxes and all the theatre were hung with light blue damask, ornamented with a rich border of silver fillagree. The fronts of the boxes were of white satin, upon which hung festoons of roses. The very curtain at the door of the parterre was of blue damask and silver. It was illuminated with tapers of Venetian wax, three feet long, in sconces of glass. All round hung chandeliers of the same. At the end of the opera the whole of the stage was discovered, ornamented similarly to the rest of the house. Over it was a painted plafond, which answered to that over the paterre; all round were columns hung with damask and silver. At the end of all were pier glasses from the top to the bottom, so that the whole theatre, with its numerous chandeliers, tapers, &c. being reflected, seemed of an infinite length. Before the pier glasses hung chandeliers, and from the columns were suspended tapers, as in the rest of the theatre. There was then a Feste di Ballo. Every dancer had a rich dress given him, and the meanest figure dancer wore satin and silver. As soon as I saw all this, I was at a loss to account for it. A Venetian told me that it was all done at the expense of a Spanish grandee, who had a mind to surprise them, and that the whole was finished in one night. It cost him 20,000 sequins, about 10,000*l.* sterling. I believe, and every body seemed to think the same, that there never was so magnificent a theatrical spectacle ever seen in Europe. The boxes were full of characters; among others a man, as an infant, with a rattle made a great noise.

Notwithstanding the despotism of the Venetian noblesse, one perceives some traces of the beneficial effects of a free government visible among the people. They have not the liberty they boast of, because they are ruled with a rod of iron, but they are infinitely less servile, than the lower classes of the rest of Italy. Beauty is found in females of the lower order, a circumstance rarely met with in the other Italian states, where poverty seems attended with every evil, filth and ugliness being constantly at her side.

"Justice is administered in a very rigid way at Venice. They do not neglect to pursue her dictates, but then it is done in

so mysterious and absolute a manner, that the injured party has seldom the satisfaction of knowing whether he is redressed or not. An English gentleman once lost a great part of his clothes and some valuable trinkets, at an inn at Venice. Every search was made after them to no effect, and the gentleman gave them over as lost, saying aloud at the same time, 'Ay, these are the blessed effects of your Venetian laws. If I had been in a country where there was a shadow of justice, I should, at least, have been assisted in my endeavours to recover them.' In about an hour he was sent for, by the officers of the police, and carried to the tribunal. 'You are the gentleman, Sir,' said the chief magistrate, 'that has lost some clothes?' 'Yes, I am.' 'And you have not been able to recover them?' 'No.' 'Upon which you thought proper to arraign the laws of our Republic, and accuse it of injustice. Beware how you offend a second time by propagating an erroneous opinion. Behold (said he, drawing aside a curtain behind which hung the dead bodies of three men,) behold these are the persons who have robbed you. They have atoned for their crimes, and offer to you a lesson of our justice and severity. Get back to your inn, the things you have lost will be there before you. Settle your affairs, and leave Venice immediately; it might be dangerous for you to remain where justice acts so quickly and with so much vigour.'

"The laws and government of Venice, the customs of the people, the peculiarity of the town itself, its form and mode of construction, all contribute in some measure to the progress of intrigues. The gondolas are made use of as the usual mode of assignation, and the state, to equip them better for that purpose, has ordained that they should be black, ornamented in the same manner, and having no difference either of ornament or colour, that may distinguish them from each other. The gondoliers are chosen men; all skilful in their office, and possessing talents aptly fitted for the purpose of intrigue; a strict adherence to secrecy; a knowledge of the windings and intricacies of the canals; an appearance of simplicity, and inattention to what passes before them. Active and intelligent in emergencies, and faithful to the highest degree in the discharge of their duty, no one is diffident in confiding to their care the secret offices of illicit amours. A number of these fellows are under the pay of government, and act as spies to the Republic. Yet they manage in such a manner as to satisfy all parties, and if employed by twenty people at the same time, would please all without betraying to one party the secrets of the other. They have an acquaintance with all the *duennas* and *gouvernantes*; are well read in the private histories of every family; will ex-

pedite an elopement, and provide rope ladders, false keys, and scale walls, with equal punctuality and alertness.

"March 2.—We hired a boat at Venice to take us to Ancona. The weather was serene and beautiful, and as I left the town, I hesitated for a long time in deciding which to prefer, the environs of Naples or Venice. We arrived in the evening at Chiozza, and passed the night in the most miserable hole I ever was in during all my excursions. From Chiozza, a small place, peopled only by sailors, we came the next day, after a delightful voyage.

"March 3.—To Ravenna. Much cannot be said of the accommodations at Ravenna. It communicates with the sea by canals.

"March 4.—Saw this morning the tomb of Dante. It stands in the public street, under a small rotunda, at a corner of the Franciscan convent. The tomb of Theodoric is also without the town, who once made Ravenna the seat of empire, under the Goths. Ravenna is famous for its mosaics, antique marbles, columns, and many remains of antiquity, both Greek and Roman. At present it is a poor Lazzaroni-looking place.

"From Ravenna, we embarked for Ancona, but sea sickness and want of wind made us put in at Savio, a small place kept alive by salt manufactories, from boiling sea water, and by its fisheries.

"March 5.—When we left Savio, such a crowd assembled to see us go off as was surprising. It was like what one sees in St. James's Street on a birthday. While I was at breakfast, a tribe of monks, &c. came in; I was startled at first, and thought they came to apprehend us through some mistake or other, but was convinced of my error, by the polite reply of their superior to my rude demand of what business they had with me: '*Niente, Signor, solamente per fare i complimenti, bon viaggio,*' &c. After all, I believe they acted as spies to discover if we were French or not. We had to send five miles for horses, from Servio, and went through Rimini to Pesaro where we slept at an excellent inn, and I bought some pictures. We entered Rimini over a bridge built entirely of blocks of white marble, in the times of Augustus and Tiberius, and left it passing under a triumphal arch erected in honour of Augustus.

"March 6.—Ill of a sore throat, caught by the sudden change in the climate. The weather sultry hot. Came from Pesaro to Ancona, all by the side of the Adriatic, through a beautiful country, the roads and the inns excellent. The Albergo Reale, at Ancona, superb and clean, two things that

seldom go hand in hand in Italy or in Ireland. The view of the sea and port of Ancona from the windows is beautiful to a degree. The approach to Ancona may be ranked among the first sights; it is something like Naples. The people in this country look ruddy, strong, and wholesome. The women are pretty. The roads were full of pilgrims. One poor lame wretch, with his family, told me it was his fifth journey to the Santa Casa; he came from the Tirol, and had been three times across the Pyrenees to Saragossa and Madrid, and twice to Rome. 'And wherefore,' said I, 'do you inflict such a severe penance on yourself?' 'Tis for my poor father, Sir,' said he, 'who is dead. He would be of the reformed church, and I hope to save his soul from being damned.' His daughter with him was barefooted and very handsome.

"March 7.—Came from Ancona to Loretto. From Camerano, the finest view I ever saw; among other objects, Loretto upon the top of a distant hill. I felt a momentary sensation of devotion. We saw Loretto all the way, during this last post—the road mountainous, you absolutely climb into Loretto. It is a poor wretched place, supported entirely by priestcraft and foreigners. The little shops full of rosaries and crucifixes. I bought some, and carried them to the Santa Casa to be blessed, where they were put into the bowl the holy family used to eat out of. I have just now been to see the glorious prospect from the tower of the cathedral with the setting sun, the mountains, the sea, &c.

"In the medicinary belonging to the friars of the Santa Casa, there are three hundred and twenty porcelain vases, given to them by the illustrious family of Urbino. Raphael made the designs for them, and it is said, Luca Giordano copied from the vases. The treasury is a blaze of jewels, gold and silver being the meanest articles in it. I saw a single diamond there, weighing seventy-two grains, and others of various dimensions; rubies, pearls, emeralds, &c. Nothing could be more curious than a specimen of natural history preserved there. It was a lump of emeralds, in their matrixes, all in their natural state. It was as large as a man's body, stuck full of emeralds like a plum cake: some were of the size of a hen's egg. Nobody can estimate its value, as no one can say what the internal part of so large a mass may contain, which from its external appearance, is evidently full. The holy house is too well known to be described. I chipped off some small pieces from the inside, and scraped away a little of the dust. I asked the lackey to do it, but he said if the sentinels observed him, he should be condemned to the galleys for life. He said the pilgrims were so eager to procure even a particle of its dust, that if the were

permitted to take any, the holy house would soon make another voyage from Loretto, and be as much dispersed as the cross of our Saviour. However, taking advantage of the general devout enthusiasm of those within, who were all gaping at the Madonna, and the nonchalance of the sentinels without, I desired my party to draw round me, and thus concealed, I bore away some of its precious walls.

"A report was circulated all over Loretto, of a wonderful Madonna that had been discovered five miles off, within these fifteen days, who was found under ground, and worked miracles every hour by dozens. The people of the house told me, that she got up in the night, and rang the bells of the church to call the people together, and had since given sight to the blind, speech to the dumb, made the lame walk, &c. 'Una cosa spaventosa, Signor!' said the master of the house, 'all the world is there.'—It was quite out of my way, so I did not go; besides it might be dangerous, for I am certain it would be difficult to preserve the composure of one's features at such holy impostures. The inns at Loretto bad and dear.

"March 8.—Came through the finest country in the world, with the best roads, to Tobatino, a small town; tolerable accommodations at the post."

A chasm here occurs in the journal. Mr. Clarke passed through Terni in his way to Rome; and, after a very short stay at the latter place, proceeded to Naples. There was naturally some awkwardness in his first meeting with Lord Berwick, after the change of plans and the disappointment which had taken place; and there is reason to believe that attempts had been made during his absence to supplant him in the good opinion of his friend and patron; but it is remembered to this day, by a gentleman then resident at Naples, how soon his admirable good humour, ability, and propriety of conduct recommended him to every one, and enabled him to assume his wonted influence and distinction in the society of the place.

His residence at Naples, after his return, did not continue more than three weeks. He finally quitted that city with great regret, in company with Lord Berwick, on the 29th of March, and arrived at Rome on the 1st of April. Writing to the author of this memoir, about a week before his departure, he says:

"I have just finished a melancholy excursion to all my wonted haunts, along the delightful shores of Baia, and through the Elysian Fields, by way of bidding them farewell. We are going to leave this place for ever, and to exchange its warm sunshine for the cold palaces and marshy catacombs of Rome.

In four days we go to Rome. Adieu, dear beloved Naples—queen of the Sicilian sea—beauteous bright Parthenope. To-morrow, I go up Vesuvius with a large party for the last time, and shall pillage the crater of some of its contents. I have long been a cicerone to the English, in showing the wonders of our volcano, and to-morrow I am to conduct Lord and Lady P. &c. &c. to the mouth of the mountain. I have models of vases enough to load a ship.”

The following are extracts from his journal, written during his stay at Rome :

“ April 16.—Saw the remains of the temple of Hercules, the villa of Mæcenas, the villa of Adrian, &c. Nothing can be more interesting than this excursion to Tivoli, and if it is extended a few miles farther to the villa of Horace, it is enchanting. The fine ruins of the villa of Mæcenas are suffering extremely from the barbarous hands of the Pope’s masons, whom we found busy in converting them to a cannon foundry, or, as they said, restoring them. By all appearance, it will soon be very difficult to trace out the original fabric, encumbered and lost as it will be, with these modern additions. There are still to be seen lofty chambers with painted stucco, and almost all the original form, the whole being situated delightfully upon an eminence commanding a view of Soracte, and all the plains as far as Rome, which was itself visible from the lofty terraces of the villa at eighteen miles’ distance.

“ Fortunately for us, we arrived in time to profit even by the depredations his holiness is making ; for in the progress of his foundry he has had occasion to excavate a square, which has laid open a beautiful court surrounded by pillars of the Doric order, without bases, and standing simply on a double plinth. These pillars were semi-columns, and composed of brickwork. They are not of the most ancient Doric order, nor yet of the improved : and this is singular, as it was during the age of Augustus, that the improvement in the Doric was introduced. The most ancient order of the Doric was without neck or base, as we see at Pæstum. The modern improvement of Vitruvius was exactly the contrary.

“ Mæcenas’s villa had directly before in the plain below, the beautiful temple of the Cough, or as it is called, *Il Tempio della Tussa*, the ruins of which still form one of the most pic-

turesque objects about it. It is very like the beautiful ruins of the temple of Venus on the coast of Baia.

"The villa of Adrian is perhaps one of the most powerful proofs that we have of magnificence of the ancient Romans. It is more like the ruins of a city, or of many cities, than of a villa. It contains four or five theatres, numerous temples, baths, mosaics, every sort of grandeur. In the vaulted plafond of one of the chambers, belonging to the baths, is the most exquisite specimen of ornamented stucco in relief, that has been left us, of the finest ages of Rome. Athenian Stewart, and many others, took all their ideas of elegant borders from this room.

"In this vast enormous villa, Adrian endeavoured to comprise the riches and splendour of the whole world. He travelled over his empire, and collected from all parts of it the magnificent things that were afterwards combined in his villa. Not a country in the world but sent something to adorn it. Asia, Greece, Egypt, Macedonia, all afforded their contribution to it. There he erected temples to the deities of all nations, and celebrated the rites of all the religions of the earth. The priests of each were dressed in the habits peculiar to their country, and all the attendants wore their native costumes. Thus decorated and arranged, it represented an epitome of all his travels. At one part of it he might fancy himself in Egypt, at another in Greece, and it became the emporium of arts, displaying at one view the riches of his whole empire.

"The excavations that have been made here, have of course been more productive than any others. The artists say it seemed as if the earth would never cease to yield up riches. Almost all the finest mosaics, marbles, and statues, were found here. Among others, that beautiful Grecian pavement, described by Pliny, of the pigeons, which is now preserved in the Capitol.

"The execution of criminals at Rome is carried on with a vast deal of solemnity, and it is very rare indeed to see an instance of what is called in England, dying hard. The most hardened villain, broken by long confinement, and the natural superstition of the country, approaches death dispirited and repentant. I remember, however, one instance to the contrary.

"A bricklayer was, by some means or other, cheated out of his property by a priest and a lawyer, the last of which was his relation. He made the usual application for justice, which was followed, as usual, with no redress. For some time he bore his misfortune with firmness, and without complaint; at

length, however, the sense of his injuries bore so hard upon him, that he became desperate, and incensed almost to madness. In this state of mind he went one day into the church of St. Giacomo, in the Corso, when the priest was officiating, and shot him dead at the altar. He was apprehended, condemned, and led to execution; every means had been used to prevail on him to confess his fault, and receive absolution, but in vain. The fatal cord was fastened to his neck; the most celebrated friar in Rome had been selected to attend him: the last moment approached, when the friar once more begged he would make confession of his sin. 'Upon one condition I will comply with your request,' said the undaunted criminal, 'let me but have a slap at the lawyer, and then I will confess both my sins at once.' At this instant he was launched into eternity, when the friar approaching to the side of the scaffold, called out to the people, saying, '*The soul of this man is gone instantly to hell, on no account let Ave Marias be said for him!*' The beatification of the poor bricklayer is on this account, at this hour, suspended in Rome.

"The mode of execution for parricide is excessively shocking. The criminal is seen kneeling on the scaffold, opposite his confessor, while ropes are passed over his legs and held by the stirro beneath, who endeavours to engage his attention entirely by prayer, and watching the moment when he seems entirely occupied with devotion, and off his guard, he makes a sign to the executioner, who at one blow knocks him down; then jumping on his body, he, with a large knife, cuts off his head, his arms, and his legs, and hangs them on different parts of the scaffold."

The travellers set out from Rome on their return to England, on the 30th of April. Some extracts from the journal, referring to this part of the tour, are subjoined.

"May 1, 1794.—Came from Civita Castellana, through Narni, where we saw the fine ruins of the bridge built by Augustus. Arrived at mid-day at Terni, and saw once more the finest cascade in the world. We went first through groves of orange and myrtle, along the side of the Nera to the bottom of the fall, and stood upon a point that commands the whole. The view from the bottom is more picturesque, but less striking. We then crossed over a rude bridge of two poles, and ascended by a wild craggy little path over the rocks, up the side of the mountain, till we came to the square

building at the top. Here you command the effect of this vast torrent, the foam of which is so violent that it throws a mist up above the top of the cascade, and spreads in a beautiful manner over all the objects around. The principle *chûte* is 800 feet; but the height of the cascade from the top to the bed of the river Nera beneath is 1364 feet. That of Niagara is only 150 feet. This is formed by a *chûte* of the Velino into the Nera, by a canal cut in the rock in the year of Rome 480.

The scenery all about the cascade is of the grandest style, and more wild and picturesque than any other I know of. The views are every where great, varied, and extended; and that, so much in the boldest style of Claude, which you see from the highest point of the rock as you descend from the cascade towards Terni, over the village of Papignio, is by much the most sublime of any I know; far exceeding any idea I can form of those I have *not seen*, from the paintings of the first masters. It comprehends an amazing extent of territory, and yet the objects which compose it are so grand, the masses of light and shade fall so fortunately upon the different parts of it, that it has none of the diminished, insignificant appearance of a bird's-eye view.

The situation of Pistoia, in a fine valley, is delightful. All this road is pleasing. The views among the Apennines, at this season of the year, when a rich verdure covers them entirely, and the evening sun throws his broad masses of light and shade upon the prospect, are really enchanting. I have heard people remark that there is always a coldness in the appearance of these mountains when compared with those of the Alps. But this depends on the time of the year at which they are seen, and I think such observations, fall chiefly from Englishmen who travel through them in the winter, when nothing is to be seen but the triste foliage of the olive, and the leafless stumps of those trees, which in summer support the vines in so many rich and various festoons. A drawing-master would tell you, that the Apennines are always a demi-tint darker than the sky; that the Alps are in the same proportion lighter, owing to the snow upon them.

"The Apennines recall to my mind those delightful vales in Argos, where the Grecian shepherds fed their flocks, and the heroes that afterwards shone with so much lustre in the plains of Troy, bred a noble race of horses. They seem particularly calculated for peace and serenity.

"May 11.—Made a long journey from St. Marcello to Reggio. The first two posts from St. Marcello, we ascended the whole way to Bosco-lungò, which is upon the highest part of the Apennines; the snow was still lying upon the tops.

From Bosco-lungo, to which place Lord Berwick and I walked, we ran down to Pieve Pelago, and continued along the tops of the Apennines for some time overlooking them all, as upon the waves of a troubled sea. The moment we left Penna di Mazzoni, we beheld the vast extended plain of Lombardy, the finest, the most fertile, of any in the world. It appears exactly like the ocean, and seems to rise from the eye like the sea. Indistinctly, at a distance, we saw the Alps skirting the utmost limits of the plain to the north, and may conceive the rapture of Hannibal and his soldiers, in the contemplation of such an enchanting garden. It may be compared to the delightful residence of our first parents, where the whole is so like a paradise, and the Po and the Tessin emulate the mazy windings of the Tigris and the Euphrates. It is laden with the choicest fruits, abounding in corn, oil, and wine; a land flowing with milk and honey. The Campagna Felice, that delightful and fertile spot, is but insignificant in comparison with the plain of Lombardy. But after all this, how melancholy are the reflections that arise in passing over it. The poor peasant of these rich domains, whose cottage is surrounded with all the luxuriance of abundant harvest, whose little garden overflows with the purple vintage of the grape, and who sleeps each night amid the choicest productions of the earth, has not a morsel of bread to support his children from famine, nor one drop of the wine he gathers to moisten his parched lips. See him, poor unhappy man, without one ray of joy, through all the years of his servitude, to interrupt the continued tenor of despondency. See how he toils to bring his harvest to perfection, and see him among the foremost in conveying it away to the crowded granaries of his master. See him busy in clearing away every part of the produce his hand has cherished and brought to perfection, and then see him call together his poor miserable family, and sitting on the bare ground, distribute among them a few crude olives, a hard unwholesome diet, to alleviate the bitter pangs of hunger.

"No pipe is heard there to gladden the valley, neither is the festive board once cheered by the enlivening accompaniment of the song or the dance. One severe, uninterrupted poverty continues throughout these fertile, luxuriant plains. So unerring are the shafts of despotism, so oppressive their weight, so blighting their influence. Oh, happy Britain! these are scenes that make us look to our country with delight. Throughout all Europe, in all the countries of the world, there is not a people so protected by their laws, and so fortunate in their government as ours. They say living at home fills us with prejudice; they mistake, it is travelling makes John Bulls of

us all. It is experience of the miseries abroad that makes us proud of the blessings at home.

"From Serra we ran down into the plain to St. Venanzie, and from thence, leaving Modena to the right, struck across, in a delightful evening, by the way of Sassolo, to Reggio, the dirtiest and most filthy hole I ever was in.

"May 16.—We came from Ivrea to Aousta, through a narrow pass among the mountains, the road always romantic, wild, and beautiful. On the road we met with some French prisoners, whom the Piedmontese were conducting to Turin. One of them was brother to the French general, and being on horseback, I mistook him for a Piedmontese, asked him the news, and where the French were. When I found him a Frenchman, I was not a little startled, thinking it might be the enemy's patrol. We arrived at Aousta without difficulty or interruption. Soon after, I applied to the Piedmontese general De Robilant, for permission to see the camp, which was granted with great politeness. I found him drinking coffee, surrounded by his aides-de-camp and officers, in the palace. He asked me several questions with regard to England, and spoke highly of the 'vin de cidre,' as he called it.

"All the cabarets at Aousta were filled with soldiers. The room we slept in beggars all description. Bugs and vermin, innumerable. Besides, it was a public passage. We walked all over the camp, and were near being apprehended as spies; but producing our permission from the General, all was well. There were 10,000 men under arms. The mountains on all sides were planted thick with soldiers, at so great a height we could not discern their tents. A trumpet from the French was led to the General this evening on horseback, with his eyes covered.

"May 17.—Could not succeed at all in bargaining with the muleteers for the passage of St. Bernard. They asked fifty louis. Upon this we set off with one servant, and a portman-teau, to walk to St. Remy, ten miles higher up at the foot of St. Bernard. By the way we stopped at the cottage of a muleteer, and refreshed ourselves with his wine and bread, under the shade of a spreading vine that hung over his door. We prevailed upon him to take us to St. Remy.

"The view of the valley d'Aousta from above is very fine, and the city at the feet of these immense mountains looks highly pleasing. A narrow, craggy path, winding between the mountains, conducted us to St. Remy. A few miles from Aousta we saw a small camp of the Piedmontese hanging upon the side of a mountain, in a little green meadow, with a frightful precipice in front, and inaccessible heights behind. It

commanded entirely the little pass we were in, and seemed itself impregnable. Higher up were planted the advanced guards, and the picquet, who was just visible from the glittering of his musket in the sun."

From St. Remy, Mr. Clarke wrote in the following terms to his mother and sister.

ST. REMY, May 17th, 1794.

"My dear mother and sister.—St. Remy! you will say, where is St. Remy?—I believe all the maps you can find will not tell you. It is a *petit bourg*, built entirely of deal boards, and stands by the side of a foaming torrent, formed by the river Battoglio, as it falls from the high tops of St. Bernard. We are in the wildest part of the Alps, the snow lying at our door, and enjoying ourselves by the side of a rousing fire. The climate here is perpetual winter. Nothing can be more sublime than the scenery now before my eyes. Conceive me in a little wooden house, at a little wooden table, in a little wooden chair, looking through the crevices of a little wooden window, not bigger than a pigeon-hole, by the side of a wooden fire, jammed in, as it were, among rocks, and woods, and waters, and yet elevated in the very regions of ether, high above all the countries and kingdoms of the earth :

'Where 'midst the changeful scenery, ever new,
Fancy a thousand wondrous forms describes
More wildly great than pencil ever drew ;
Rocks, torrents, woods, and gulls, and shapes of giant size,
And glittering cliffs, on cliffs, and fiery ramparts rise !'

What a parcel of mites ye all are ! creeping about in the world below. Ye have no idea of the severe grandeur of the Alpine mountains, whose hoary tops drink the aerial solitude of the skies, and pour forth all the rivers of Europe. Here on one side rushes forth the Rhine. There the Danube, roaring, tumbles headlong, a torrent all foam and fury. See there the Tessin, and the Reusse, at first all noise and clamour, till, as they advance into the plains, they become wedded to the Po and the Rhine, and flow peaceably into the sea.

"Yet do not suppose that all are *agréments* among these regions. What a miserable picture of human nature in the wretched inhabitants ! Ugly, deformed, famished, filthy, and ragged ! Their throats laden with immense tumours, the horrid effects of drinking snow water. The French breaking in upon

them from all quarters, and tearing from them the little that nature has allowed them. Whole families separated and ruined. The men all drained for the wars, the women toiling in the field, and the children alone at home, crying for their parents and for bread.

"But I must talk of other things. I hope to be in England almost as soon as this letter. We shall be in Switzerland to-morrow. Perhaps at Lausanne, perhaps not. We mean to go from here to Vevay, and from thence to Basle, and so down the Rhine. We have lost a great deal of time since we left Leghorn, which hurries us very much. I was in hopes by this time to have been in Germany. However, sooner than not be home in time, we propose to travel night and day. It is these mountain journeys that delay us more than we expected. We have met with no danger from the French, they are encamped within twenty-five miles of us at the bottom of the *petit St. Bernard*: the mountain we are to cross is called the Grand St. Bernard, and lies at some distance from the other.

"If you wish to see where I am, you must look in a large map for Milan and Turin, and then between these two, a little to the north, you will see a place called Aousta, that is at the bottom of the mountains, about fifteen miles below me, and I am at the bottom of the Grand St. Bernard, about ten miles above me; which mountain we pass over to-morrow, and then descend into Switzerland, to Vevay and Lausanne. If I should go to Lausanne, I will endeavour to call on Severy.

"Yesterday I saw the different camps belonging to the King of Sardinia, which are stuck up and down on the mountains, in the most picturesque manner you can conceive. Instead of the shepherd's pipe, one hears nothing now among these rural scenes, but the drum and the trumpet. All is war and anarchy. I think there is little doubt but all Italy will revolt before two more years are past. The French carry every thing before them; where they cannot conquer, they bribe, and that has more effect."

At last, with some difficulty, they passed the Great St. Bernard, and descending into the valley, arrived at Geneva on the 23d of May; thence by Lausanne and Berne, to Basle. Here they were compelled to leave the usual route on the banks of the Rhine, on account of its being commanded in many places by the French artillery, which rendered it dangerous even to travellers. They turned off therefore through Fribourg and Radstadt, which were then occupied by the troops of the Prince of Condé, to Manheim; thence, to May-

ence, where they embarked upon the Rhine for Cologne. Passing through Cleves, Utrecht, and Leyden, they came to the Hague; embarked at Hellevoetsluys, and landed at Harwich on the 8th of June, where the Journal ends.

Before this Italian journey is dismissed from the mind of the reader, the Editor is tempted to present an extract from the Letters on Travel, already alluded to, which were written by Mr. Clarke during this tour, and were manifestly begun with a view to publication, although now found in an imperfect state. They are addressed to the young nobility of England, and are designed to excite them to a wider field of enterprise and research in their travels. It is remarkable that he should have directed their attention in such earnest terms to those very countries (Greece, Egypt, and other parts of the East,) in which he himself afterward exerted, with such success, his own ardent spirit of research, and where so many others have since reaped a most abundant harvest of interesting discovery.

"—It is usual," he says, "to dedicate a certain portion of your time to foreign travel. Fortunately, the systems of English education unite in embracing so excellent a mode of acquiring extensive knowledge. But, let me ask, have your continental expeditions been attended with that advantage, which it is natural to suppose would result from the lavish contribution, both of time and treasure, which has been exacted to complete them? A painful witness of the contrary, it is with deep concern I call to mind, the shameful manner in which they are frequently accomplished. Roaming about the Continent, in almost proverbial apathy, becomes your characteristic. For what purpose do you travel? Is it to associate promiscuously with adventurers?—to be immured in gaming-houses?—to be seen all the morning at the billiard-table; and all the evening intoxicated; or at the faro-bank?—to become the object of contemptuous ridicule in every country you visit? Is it for this Albion pours forth her sons upon foreign ground; in the vain hope of obtaining ornaments to her senate, honours to her state, understandings enlarged, prejudices corrected, and taste refined?

"—Italy, exhausted by a long and successful scrutiny, is unable to supply new gratification, either in art or antiquity. But in other countries, removed from common observation, new fields of enterprise open an extensive prospect of pleasing research; as the desolated shores of Greece; the peaceful islands of the *Ægean*; the interesting plains of *Asia Minor*;

the lakes, the ruins, and volcanoes of Syria ; and the long-hollow valley of Egypt.

“These are the countries to which I would invite your attention. Among these scenes, I would lead you to rescue from indiscriminate ruin, the marvellous profusion of antiquities which lie scattered in promiscuous devastation, and yield a daily tribute to the wants or superstition of the inhabitants. The difficulties and dangers that have long been supposed to separate us from a connexion with them, I will set aside. The loss which the fine arts have suffered from the want of such an intercourse, I will endeavour to delineate ; the advantages that would result from a more intimate acquaintance with the productions of ancient genius it is needless to portray. Instead of being harassed at Rome, by a perpetual cabal of antiquarians and artists, whose intrigues and discord pervade all the avenues of inquiry, and interrupt the progress of your studies, I will strive to withdraw you to those delightful scenes, where imposition has not yet dared to intrude ; where, fearless of her snares, you may investigate the ruins of empires, whose inventive genius first produced, and then carried to perfection, those arts, which Rome, in the zenith of her glory, could only imitate.

“I invite you to extend the sphere of your ideas, that reflection may cast off the yoke of prejudice, and break the bonds by which custom has enchained the flights of human reason ; to walk among the sequestered pillars of Athens, or trace the mystic labours of Egypt upon the pyramids of Memphis ; to mark the chisels of Praxiteles and Phidias, among the mouldering fabrics of Greece, or drop a tear to literature over the august ruins of Alexandria : impressed with the noble fire of enthusiasm, to behold the lofty temples of Palmyra, or contemplate with awful veneration the colossal majesty of the Theban Memnon, among the sepulchres of Osymanduas ; to snatch from dissolution the precious relics of expiring taste, and to rescue the inestimable monuments of antiquity from the jaws of everlasting oblivion.

“Inasmuch as Greece was the mistress of the fine arts, and Rome only her disciple ; inasmuch as Greece supplied the originals, and Rome the imitations ; and the imitation never approached to the perfection of the original ; the antiquities of Greece demand every investigation that the man of taste can appropriate to scenes of instruction and delight. The Romans themselves, when masters of the world, did not scruple to acknowledge the superiority of the Grecian artists. It is particularly remarkable, that whenever their authors chose to celebrate any exquisite production of art, it was the work of

Grecians. Did architecture display peculiar traces of the sublime? It bespoke the divine talents of Ictinus, Callicrates, or Mnesicles. Was any thing among them famous in sculpture? It was attributed to Polycletus, Alcamenes, Myron, Phidias, Scopas, or Praxiteles. In painting? to Polygnotus, Apollodorus, Zeuxis, Parrhasius, Timanthes, Pamphilus, Euphranor, or Apelles. Works of genius were invariably attributed to those celebrated men, who had flourished in Attica, beneath the liberal patronage of an immortal Pericles, and were never allowed to be the production of artists who had worked at Rome, or had lived nearer to their own times than the age of Alexander."

CHAPTER IV.

Mr. Clarke tutor in the Mostyn family—in the family of Lord Uxbridge—Tour to Scotland and the Western Isles with the Honourable B. Paget—Extracts from his Journal—Ailsa—Giant's Causeway—Islands of Mull—Coll—Iona—Staffa—Rùm—Cana—St. Kilda—Highlands of Scotland—Cumberland Lakes—Close of the Tour.

THE engagement of Mr. Clarke with Lord Berwick having been brought to a close, soon after their arrival in England, in the summer of 1794. he again betook himself, with more than his wonted satisfaction, to the abode of his family at Uckfield. Even when the world was new to him, and its aspect more alluring and attractive, this quiet spot had ever been the object of his choice; but now, after a long and anxious residence in the busy scenes of life, the affection and sympathy he found at home were particularly delightful to him. Here, therefore, he remained several months, occupied indeed occasionally in the arrangement of his collection from Italy, but apparently unmindful of the time which was passing over him, and indisposed to speculate upon any change. But this state of things could not continue long. By the fruits of his last engagement, he had been enabled to pay off his College debts, and farther to gratify his generous and affectionate heart, by the exercise of kindness towards those he loved, and who had fewer resources than himself. He had also become possessed of some valuable pictures, books, prints, and minerals,* which he had collected with no small labour and cost, and to which he at-

* Of the value of these some judgment may be formed, when it is stated, that the freight and the duties charged at the Custom House amounted to 258*l*.

tached no inconsiderable value : but beyond this, he had made no provision for his future support ; and although he had been chosen, since his return from abroad, fellow elect at Jesus College, almost without opposition, yet this was a barren honour, productive of no emolument whatever, and not even necessarily leading to a fellowship. Something, therefore, was immediately to be done, and for want of a better occupation, he appears to have thought seriously of joining the Shropshire militia, in which he had been for some months a lieutenant, in consequence of his connexion with Lord Berwick, and to which he had actually received a summons from the Colonel. But this scheme, which seemed to promise so little either of credit or of advantage, was fortunately prevented by an engagement much better suited to his talents, and more agreeable to his taste. At the recommendation of Dr. Bagot, (Bishop of St. Asaph,) he was requested to undertake the care of Mr. Mostyn, (now Sir Thomas Mostyn,) at that time a youth of about seventeen years of age : and to render the offer more desirable, it was intimated to him, that travelling, both at home and abroad, formed a part of the plan which the father of the youth had in view for him. In the mean time, it was settled that Mr. Clarke should reside with Sir Roger Mostyn's family, in Wales. For this purpose, he left Uckfield, about the 26th of September, 1794, to repair to Mostyn ; and in his way there, he paid a visit to his old friend the Bishop, at St. Asaph ; at whose house he was received with the greatest kindness, and hospitably entertained for several days. Of the attentions shown to him by this valuable friend, whose learning and accomplishments were not more remarkable than the kindness of his heart and the high-bred urbanity of his manners, Mr. Clarke was deservedly proud. The interest the Bishop had taken in the welfare of his family, from the moment of his father's death, and the regard he had shown in particular to himself, were alone sufficient to excite a warm sentiment of gratitude in the breast of a young man, who never received the simplest kindness, without burning to requite it : but here this feeling was greatly heightened by the pleasure he derived from the conversation and society of the Bishop, and the veneration he entertained for his character, which stamped a double value upon every favour he bestowed upon him. Many notices of this sentiment are dispersed throughout his manuscripts, and there is great reason to regret the loss of a letter written to a friend upon the occasion of this visit, from St. Asaph, containing a most agreeable and spirited picture of the tasteful occupations, and the unaffected piety, by which the green old age of this venerable prelate was distinguished.

Of his manner of life and employments at Mostyn, there remains less information, than of the occurrences of any other equal portion of his history; but there is reason to believe, that he was perfectly satisfied with the kindness and the cheerfulness of his pupil's family, as well as with the society to which he was introduced; and there is evidence enough to show, what was ever obvious to his friends, how impossible it was for him to live long in any place without discovering among its native resources, some means of contributing to his own improvement, and to the gratification of those around him. Before he had been a month in Wales, he employed himself in making a catalogue of the Mostyn library, a work of no inconsiderable labour and research, which it is believed is still in use at Mostyn. Several fugitive pieces composed by him, at this time, both in prose and verse, are still preserved by his friends; and some curious observations upon Welsh manners and character, which occurred to him at Mostyn, will be introduced to the notice of the reader, in the extracts from a work, to which allusion has already been made, and which was published in the course of the next year.

It was here he became known to Mr. Pennant, with whom he afterward corresponded upon several subjects connected with the history and antiquities of the Principality, and upon other topics, in which they felt a common interest. His residence in Sir Roger Mostyn's family ceased in little more than a year; for some reason not explained in his letters, that part of the plan which related to travelling was never carried into effect; and on this account, probably, the engagement terminated sooner than was at first in the contemplation of either of the parties. At all events, he seems to have been perfectly at liberty in the summer of 1796; for in the course of the general election of that year, he was one of a large party assembled at Lord Berwick's seat in Shropshire, at that time a scene of prodigious interest and agitation, in consequence of the contest for the borough of Shrewsbury, between the Hills of Attingham, and the distinguished family of the same name, and of a kindred race, at Hawkstone. This contest, memorable not less for the profuse expenditure it occasioned, than for the feuds it created or revived among some of the most respectable families of the county, was the means of exhibiting Mr. Clarke's talents in controversy, — a field, in which they had never been exercised before, and in which, happily for himself, they have scarcely ever appeared since. The occasion of it was this: a long and laboured pamphlet, called "*Hard Measure*," had just issued from the opposite party, written as was supposed by Sir Richard Hill himself, and containing many

sharp and cutting reflections upon the Attingham family and cause, with some strong documents in support of them. To this it was necessary to reply without delay ; and for the sake of greater despatch, several literary friends of Lord Berwick, who were in the house, undertook to divide the task among them, each taking the part which he thought himself most competent to answer ; but as it was afterward evident that this scattered fire would be much more effectual, if skilfully brought together, and directed by a single hand, Mr Clarke was fixed upon for this purpose ; and to him was confided the delicate and difficult operation of selecting, shaping, and combining, from the materials so prepared ; with permission, of course, of which he availed himself largely, to add whatever arguments of his own he might think likely to increase the general effect. Accordingly he set himself to work with his usual spirit, and having scarcely slept while it was in hand, he produced in a marvellously short time, matter enough for a quarto pamphlet of a hundred closely printed pages, which having been carefully revised by the lawyers, was rapidly hurried through the press, and immediately published, under the happy title of "*Measure for Measure.*" From a work of such a nature, it would be invidious to quote a single passage, even were it capable of giving pleasure to any one ; but it may be proper to state, that the pamphlet answered completely the object it had in view : it produced a great sensation at the time, was a source of no inconsiderable triumph to the party whose cause it advocated, and, as it is believed, received no reply.

In the autumn of the same year, he accompanied Lord Berwick to Brighton, where he commenced the periodical work, already noticed, of which it is now time to give an account. This work consists of twenty-nine numbers, of which the first is dated Brighton, Sept. 6, 1796 ; the last, London, March 6, 1797. The whole were afterward collected and printed, in a single volume, some time in the latter year. The book is entitled "*Le Rêveur, or the Waking Visions of an Absent Man ;*" and, with the exception of a single number, or at the most two, furnished by his valued friend the Rev. George Stracey, and two short poems, one of little value by Miss Seward, the other upon a stormy first of May, of considerable merit, by Dr Busby, afterward Dean of Rochester, it is entirely the production of his own pen. The principal materials upon which he depended, were the substance of the information he had gathered, and of the observations he had made in the different situations in which he had lived, whether at home or abroad, since the publication of his tour ; but as these were of a nature soon to be exhausted, and as the contributions of his friends came in but slowly, we can-

not wonder, that it was brought to a conclusion within the compass of a few months; more particularly when we consider, that before it had extended to that period, the author was engaged in an occupation which required the greatest part of his time, and all the attention he could command. The work is now no longer to be found in any shape. The separate numbers, which obtained no great circulation, have, it is thought, perished long ago, with few if any exceptions: and, as for the volume, it was stifled by a singular accident in its birth. His bookseller, it appears, who had hitherto been a loser by the numbers, had calculated upon a more satisfactory sale, when the whole should be finished and published together; and with this expectation he had printed a considerable edition, with corrections and additions by the author; but some cause of delay had intervened; and having one day gone into his warehouse with Mr. Clarke, to show him the work, he found, to his great dismay, the whole impression in a corner, so injured by the damp that not a single copy could be made up for sale. Very different, however, were the feelings of the author upon this unexpected sight. By this time his fears respecting the success of his work had begun to predominate over his hopes: and he afterward confessed to a friend, that he never was more delighted in his life, than when this accident so completely put an end to both. One copy he had previously received for himself, which has been since found among his papers, with the words '*Not published*,' written in the titlepage by himself. As the reader may be curious to know something of the contents of a work, which is now so scarce, and whose fate was so remarkable; two or three of the numbers will be reprinted as specimens of the whole.

Extracts from the Réveur, No. VI.

"Among the Welsh the most striking feature is their pride; which, without doubt, is a strong national characteristic. I write this with the greatest impartiality, and shall omit no precaution which may enable me to determine, with strict accuracy, the different facts I am about to advance. The influence of Welsh pride bespeaks itself in a forcible manner, upon the first objects that attract a stranger's attention; upon the walls of their houses, and the windows of their apartments; hardly a pannel of the one, or a pane of glass in the other, is free from the ostentatious parade of heraldic emblazonment. Coats of

arms, in which all the family quarterings from the days of Cadwallader, have been registered and preserved without curtailment or diminution, glitter upon every wainscot, and obstruct the light of every casement. Above, below, on all sides, the ghastly features of their remote ancestry grin horribly upon canvass ; while, suspended aloft upon sturdy hooks, the enormous roll of pedigree at once flatters their vanity, and hides amidst its dusty folds a colony of superannuated spiders.

“ We are accustomed, when speaking of a Welshman, or a German, to combine an idea of genealogical pride with our conception of their characters. But as it does not always fall to the lot of Englishmen to see these singular examples of human folly, a description of a Welsh pedigree may, perhaps, be amusing to those among my readers who have not had an opportunity for this purpose.

“ The first I met with during my residence in that country, was as great a curiosity in its way, as any which I have since examined.

“ It was upon parchment, and divided into two parts ; as the whole together would not have been portable. These were formed into two immense rolls, lined at the back with silk. The first was fifty-three feet in length, the other forty-nine. It began with Adam and Eve, and continued through all the ages both before and after the deluge. As a vignette, or headpiece, our first parents were represented in the garden of Eden. The great progenitor of mankind was represented in a cumbent posture, very composedly leaning on his right elbow ; while the Deity, in papa^l robes, was politely handing Eve out of his side. From their loins an uninterrupted series of generations descended ; which are traced through all the patriarchs, prophets, and heroes of antiquity. Towards the middle of the first division it came to the birth of our Saviour ; who was introduced with his portrait and family, as among the number of the ancestors. Absurd and incredible as what follows must appear, the line of descent was continued through the Messiah, and carried on, in direct contradiction to the Gospel, through all the second division, until it arrived at the birth of its present possessor.

“ The pride of the Welsh is not merely genealogical ; neither is it altogether the result of those feelings, which arise from a consciousness of being the only remaining stock of true Britons. It is in great measure founded upon the arbitrary spirit of the feudal system. That pride, which formerly taught the lord to look down with contempt upon his vassal, still inclines every Welshman to consider himself as a being of a different nature from those whom Providence has placed below him. In fact,

almost all Wales is a remnant of the feudal system. Its inhabitants consist of rich and poor, with little or no medium. It is the great man and his dependant, the lord and his vassal.

"The clergy, who in other states form a respectable, and I may add an independent part of society, are by no means of that description in Wales. They are chiefly selected from the lower orders; from the cottage of the husbandman, or the offspring of the peasant. I make use of the terms *husbandman* and *peasant*, because those who bear the denomination of farmer throughout the country, differ but little from an English day-labourer. They possess a few acres of ground, usually appropriated to potatoes and barley; with a cottage by no means superior, and frequently inferior, to the little tenement of an English *pauper*. Hence it is, that at the houses of their principal people, the clergy deem it no degradation to associate with the upper servants, to dine at their table, to drink ale in their kitchen, and now and then to be admitted, as a mark of peculiar condescension, to the presence of their master. Their female relations are not unfrequently servants in those families, acting in the capacity of ladies' maids, house-keepers, &c.

"I do not remember to have experienced a greater shock, than I once felt, at sitting down to table with a young clergyman who had been educated at the University, and whose sister acted as servant in the very family with which he was invited to dine. I well knew the master of that family possessed a benevolence of heart, with a degree of urbanity and affability of manners rarely to be paralleled. It was to me a perfect paradox. More intimate acquaintance with the manners of a people, to which I was then a stranger, has since unravelled the mystery. It was not that a clergyman in Wales was exposed to a trial, which an English clergyman would have been unable to support; but that the Welsh clergy are a different set of men, and are selected from an order of society, inferior to that class from which the English usually derive their candidates for holy orders.

"Until within these few years the annual stipend of a Welsh curate did not frequently exceed the sum of ten pounds; for which he was often necessitated to fulfil the duty of three churches. In the Isle of Anglesea this case was very common. What consequences can be expected among the people, when a profession which they ought to contemplate with reverence, becomes so shamefully degraded? When the sacred lessons of morality are to be taught by men, calculated only for the business of a cow-yard, or the labours of a plough? When the gaping multitude are to seek examples of piety and temperance

in a pot companion who is ushered to the pulpit reeking from an ale-house? Can we wonder that persons of superior rank and education are cautious how they admit men of such a stamp to form any part of their society; and betray a proper reserve, a decent pride, when business or politeness renders their presence necessary?

"And perhaps we may here discover one source of that hauteur which appears among the principal families throughout the principality. As we are accustomed to form our ideas of all mankind from that part of it with which we live, the Welsh naturally conceive all clergy to be like their own, and all orders of society upon the same footing as they are found in Wales.

"Notwithstanding the wretched appearance which the clergy make throughout the Principality, instead of teaching his offspring the arts of agriculture, a Welsh farmer educates his children to the church. He has been told that *a parson is a gentleman all the world over*, and therefore, actuated by his national pride, he naturally determines to have as many *gentlemen* in his family as there are males belonging to it. The county of Merioneth sends out annually such a concourse of candidates for holy orders, that the *parsons of Dolgellau** are a proverb in the country. One of the chaplains to Drunimond, a late Bishop of St. Asaph, observing the vast numbers that came to be ordained from that quarter, said, '*Sure, my Lord! we ought to style that part of your diocese the Levitical land.*'—'*Oh no,*' replied the Bishop, '*rather call it the hot-bed of the clergy!*'

"When I was a stranger in the country, it happened that a dispute arose between me and the master of a little ale-house in the wilds of Merionethshire. I had stopped there to refresh the horses of my post-chaise; and wished to proceed. He thought it his interest to detain me, and brought my postillion into the plot. The consequence was, a pretext that my horses were knocked up; and I was compelled to pass the night in his miserable hovel. In the morning another pair was added to the pair I had before; and it was insisted that I must use them, or remain where I was. In this dilemma, I inquired, as it was a village, for the clergyman of the place; and found him at bowls, with half a dozen *ragamuffins*, not a little heated by ale and exercise. I told my story, and was much surprised to find my reverend friend a staunch advocate for the publican. 'The roads were bad—the country mountainous—the carriage heavy;' and many other excuses, calculated to justify extor-

* The capital of Merionethshire.

tion, followed in a breath. Finding all remonstrance futile, I left the place with my post-chaise and four ; not without apprehension that the number would be augmented to six, if any more horses could be procured. Arriving at Caernarvon, I related my adventure, and I found to my astonishment, that the clergyman to whom I had made application, was no less a personage than the publican's own son.

"I have already stated that a Welsh farmer is nearly upon the same establishment as an English day-labourer. An apothecary is not of a higher order, nor better educated, than an English farrier. If severe illness, or approaching death, renders a physician necessary, he will have two potent obstacles to encounter. In the first place, he will not be able to obtain any drugs ; but should he be so fortunate, they will be found utterly unfit for use. In the next place, when, by sending to all the old ladies in the neighbourhood, he has collected a few articles of the *materia medica*, his patient, unless narrowly observed, and compelled by a superior, will not swallow one of his prescriptions ; such is their prejudice against all medicine.—Superstitious beyond measure, they fancy half their cures are effected by charms, invocations, and witchcraft. Bark is rejected upon a supposition that it penetrates their bones ; opium, upon a plea that poison never should be touched. The preference is given to quack medicines of every description ; because their contents are a mystery, and all mysteries demand a degree of reverence from the ignorant.

'Est enim ignotum omne pro magifico habendum.'

"I have omitted to notice many singularities respecting these Cambro-Britons, because they have already been mentioned by other authors. The character and customs of the Welsh have been delivered to us, principally through the partial medium of their own writers, or casually collected by the uncertain observation of hasty travellers, who, in their progress through the country, appear to have investigated old castles and cataracts with greater avidity than the manners of the people.

"I have had an opportunity of seeing the state of ecclesiastical affairs in various parts of Europe ; and as I wandered from one nation to another, observed and lamented the abuses of the church. I did not conceive it possible, to find a pulpit so shamefully prostituted as it is in Italy ; where the degree of degeneracy advances, in proportion as you approach nearer to the walls of the Vatican. Nor do I pretend to make any sort of comparison between a Welsh clergyman and an Italian

priest. Every exertion has been used, of late years, in the dioceses of North Wales, to restore the church to its proper degree of dignity and order. Exemplary men, amply calculated to effect so desirable a reform, have omitted no precaution which may tend to eradicate the abuses they discovered.

'Nil desperandum, Teucro duce, et auspice Teucro.'—HON.

At the same time, I cannot refrain from deriving this satisfaction from the experience I have obtained ; that the church is no where supported with such credit, nor conducted upon so respectable an establishment as in England. And I beg leave to conclude this paper by congratulating my readers on possessing a set of men, WHOSE TALENTS AND VIRTUES ADD DIGNITY TO THEIR PROFESSION, AND A KING, WHO SUPPORTS THE RELIGION OF HIS COUNTRY BY THE INFLUENCE OF EXAMPLE."

Extracts from the Rêveur, No. XXII.

"The ceremony of the Papal Benediction is still distinguished by a degree of magnificence, which entitles it to rank among the grandest of human spectacles. It is of a nature calculated to interest every beholder ; and, whatever form of religion may prevail, it cannot be contemplated by a feeling mind, without calling forth the liveliest emotions of piety and reverence.

"I accompanied a party of my countrymen from Naples to Rome, for the purpose of being present at this festival —Easter-day is appointed for its celebration. A prodigious concourse of pilgrims, from all parts, filled the different avenues to the metropolis. Arriving at the Place d'Espagne, we found the hotels usually frequented by English travellers, already occupied by a promiscuous assemblage of Poles, Danes, Swedes, Germans, French, Spaniards, and Portuguese. After some difficulty, we procured lodgings near the *Corso*, and waited with impatience for the following day.

"Early in the morning, we received a card of invitation from the *Major Duomo* of his Holiness, purporting, that his apartments, adjoining the Vatican, would be open to receive English, and other foreigners of distinction ; from the windows of which we might have the best view of the ceremony, or, if we pleased, ascend the roof of the Peristyle ; which would

place us within hearing of the benediction, and afford a *coup d'œil* of the whole.

"We hastened to St. Peter's. The concourse was amazing. From the Castle of Angelo to the façade of the church, one might have walked on the roofs of the carriages; so closely were they jammed together. This amazing procession seemed to move slowly on like one undivided mass. The foot passengers were exposed to great danger; there being no separate pavement, as in London, appropriated to their use.

"It was a pleasing sight for Englishmen, to behold their Prince the most conspicuous in the middle of this prodigious throng. His Royal Highness Augustus Frederic was elevated in his phaeton above them all; while the populace, among whom he is universally and deservedly beloved, rent the air with shouts of—*Viva! Viva! Il Principe d'Inghilterra!*"

"Arriving at the *Major Duomo's*, we found a brilliant assemblage of foreigners, in magnificent dresses, mixed with a large party of our own countrymen; who were regaling themselves with chocolate, ices, lemonade, and a profusion of other refreshments. I made my escape as soon as possible through a window, to the roof of the colonnade; and climbing one of those enormous statues which ornament the Peristyle,* placed myself above it, like Anchises of old, upon the shoulders of Æneas.

"It is impossible to describe the scene which presented itself before me; and were it otherwise, imagination is incapable of conceiving so sublime a spectacle. The inhabitants of the whole earth seemed assembled in one vast multitude; while the murmur of innumerable tongues, in different languages, ascended like the roaring of an ocean. Confusion could scarcely be greater in the plains of Shinar, when the descendants of Noah fled from the superstructure of their ignorance and folly.—As far as the eye could reach, the tops of all the houses in Rome were laden with spectators. A single square, in the spacious area below, was preserved free from the multitude, by the whole body of the Pope's military; who formed themselves into a quadrangle. Every other spot was occupied; and so closely were the people united, that their heads in motion resembled the waves of the sea. The variety of colours† blended together, and glittering in the sun, produced an effect of

* They are eighty-six in number, and were designed by Bernini.

† This appearance is unknown in England. A sameness usually prevails in the dresses of an English mob; whereas those of Italy display great diversity of hues. Scarlet, crimson, green, and white, generally predominate. The Italians are partial to the gaudiest colours, and adopt them in their dress.

equal novelty and splendour. It surpassed all I had ever seen or imagined; nor do I believe any country upon the globe ever produced its parallel.

"While I was occupied in the contemplation of this amazing spectacle, a loud flourish of trumpets, from two opposite sides of the area, announced the approach of cavalry. First entered the nobles, in habits of green and gold, mounted upon sumptuous chargers: who came prancing into the centre of the military quadrangle. Other troops followed, and the whole corps saluting the balcony over the grand portals of St. Peter's, from which his holiness was to appear, arranged themselves in order.

"At this instant a bell tolled; and throughout the whole of that vast multitude, such a silence prevailed, as one would have thought it impossible to produce without a miracle. Every tongue was still, and every eye directed towards the balcony. Suddenly, the majestic and venerable figure of the Pope, standing erect upon a lofty and self-moving throne, appeared through clouds of incense, burning around him. As he advanced, his form became more and more distinct. All behind was darkness and mystery. The most costly robes decorated his body; a gorgeous tiara glittered on his brow; while enormous plumes were seen waving on all sides of the throne. As he approached the light, with elevated front, and uplifted hands, he called aloud on the Almighty. Instantly, the bare-headed multitude fell prostrate. Thousands and tens of thousands knelt before him. The military, with a crash, grounded their arms; and every soldier was seen with his face to the earth. A voice, which penetrated the remotest corner of the area, then pronounced the benediction. Extending his arms, and waving them over the people, he implored a blessing upon all the nations of the earth. Immediately, the cannons roared—trumpets screamed—music played—all the bells in Rome sounded—the guns from St. Angelo poured forth their thunder; more distant artillery repeated the signal, and the intelligence became conveyed from fortress to fortress throughout the remotest provinces of the empire.*

"In my life I never witnessed a ceremony more awfully sublime. The figure of a virtuous and venerable man, publicly appealing to Divine Providence for a blessing upon the whole human race, is surely an object of the highest reve-

* It is said, but I will not vouch for the truth of it, that the news is conveyed to Genoa and Naples in a quarter of an hour. Peasants in a neighbouring country fall on their knees and cross themselves, when these signals are given.

rance.* Add to this, the spectacle afforded by assembled myriads silently and fervently assenting to the supplication ; and I think few among mankind, whatever systems of religious persuasion may be acknowledged, would hesitate to join in the solemnity."

The next occurrence to which the history of Mr. Clarke's life conducts us, is his connexion with the family of the late Lord Uxbridge ; a connexion formed, it is uncertain under what auspices, or upon what terms, but eventually not less honourable to Mr. Clarke than satisfactory to many members of that family, to whom, in the course of his engagement, he became intimately known. The first object of his care was the youngest son of the family, the Honourable Brownlow Paget ; a boy of tender age, and of a constitution so very delicate, as to render it advisable that his education should be continued, as well as begun at home. In this view, an engagement of some standing was contemplated by the family with Mr. Clarke ; and rooms having been expressly prepared for their permanent residence together, at Beau Desert, the seat of Lord Uxbridge, in Staffordshire ; he joined his pupil at that place, in the autumn of 1796.

The task which he had undertaken, that of instructing in the elements of knowledge, was entirely new to him ; but he set about it with alacrity and spirit. Laying aside gradually all other objects and pursuits, and confining himself conscientiously and sedulously to the duties of his charge, he soon began to find himself at home in it. Every thing, indeed, that was connected with this engagement tended to encourage and to reward his exertions. His pupil, who is represented by him to have been docile, intelligent, and affectionate, was delighted with his instructor, and improved rapidly under his care ; the kindness of the family, with which he had reason to be satisfied from the beginning, became more and more decided, and was testified in more pleasing forms, in proportion as his own qualities and endowments became better known ; and Lady Uxbridge in particular, to whom the feebleness of her son's constitution rendered him an object of deeper interest, and who

* Dr. Moore was so sensible of this opinion, that, after witnessing the ceremony here described, he observes—"For my own part, if I had not, in my early youth, received impressions highly unfavourable to the chief actor in this magnificent interlude, I should have been in danger of paying him a degree of respect very inconsistent with the religion in which I was educated."

every part of Europe. To this subject allusions are often made in his Italian journal, as well as in his letters after his return ; and the interest thus excited in his mind, although afterward apparently suspended, was revived with much greater force, when the journey to Scotland was proposed to him. It was not that he attached an undue importance to any opinions he might form in that early stage of his knowledge ; but he was eager to engage in the inquiries to which the controversy had given rise ; and having had frequent occasion, during his residence at Naples, to notice the observations of Scotch gentlemen, relative to the resemblance which they affirmed to exist between the minerals of the Western Islands and the productions of Vesuvius, he was willing to believe, that by a stricter scrutiny of this tract than it had hitherto received, he might be able to ascertain more correctly the nature and extent of this resemblance, with its proper bearing upon the controversy ; and he was the more sanguine in this hope, because after the particular attention which he had paid for nearly two years, to the operations of subterraneous fire, both in a state of activity in Vesuvius, and in the traces of its influence among scenes no longer subject to its immediate agency, he thought himself so far competent to recognise them in any other country, if they were to be found. This is the substance of his own account ; and one natural consequence of this pre-occupation was, that his attention upon the journey was more alive to geological facts than to any other ; and that a larger portion of his time and labour was bestowed upon this question, than it would naturally have claimed, in a tour not undertaken expressly with a view to it. Had this, however, been the only objection, the reader might not have lost much ; for whatever value might be attached to his inferences at that time, his researches are often curious and minute, and his reasoning always ingenious and amusing ; but it unfortunately happened, that the leaning of his judgment in the course of his tour, seems to have been in a different direction from that which it afterward took, when in a maturer state of his own knowledge, the learned and accurate labours of Dr. Macculloch had been submitted to him. Hence the difficulty, which applied to himself, and hence the restriction enjoined upon his friends ; in conformity to which they feel themselves compelled to withhold, not only those parts of his journal in which his arguments are directly stated but even all the more general remarks from which his mode of reasoning might be inferred. How much the observance of this restriction must detract from the spirit of a journal, under taken in such a frame of mind, and how frequently the pas

sages omitted must be those which bear the strongest mark of his own genius, need scarcely be observed ; but in his personal narrative, and in the fruits of his general observation, enough of interest, it is hoped, will remain to justify the copious extracts, which will be made ; respecting which, however, in justice to his memory it must be observed, that they are presented to the reader, precisely as they appear in the journal, and that they have received no alteration, either from his own, or any other hand, since they were hastily written on the tour. Some of this country has been examined since, both by foreigners and natives, whose accounts are before the public ; but Mr. Clarke's views have a character of their own ; and of the Island of St. Kilda in particular, which is so difficult of access, and so far removed from the ordinary track of human commerce, as to receive its letters only once a year ; and so differently constituted from the rest of the kingdom, as to pay its rent in feathers ; it is impossible to find a more amusing or interesting account than that which is given in this tour. It should be mentioned, that before he set out, he had frequent communications with Mr. Pennant, upon the subject of his journey ; who kindly pointed out to him such parts of the country in general, and such objects in particular, as had either escaped his own notice, or had not been within the compass of his plan ; among the former may be reckoned that range of insular territory, extending from the point of Oreby in Lewis, to Barra Head, which had not been visited either by Mr. Pennant, or by Dr. Johnson. To this may be added, the peculiar advantages he derived from the influence of his pupil's family. He carried letters from their friends to the most distinguished persons in Edinburgh, which secured him a ready access to the best information upon every subject connected with his views ; and a revenue-cutter, placed at their disposal at the request of Lord Uxbridge, afforded him every facility in prosecuting his researches among the islands.

Mr. Paget and Mr. Clarke left London on their tour, June 22d, 1797, visited the several objects of curiosity in Derbyshire, Yorkshire, &c. in their way to Scotland, and arrived at Edinburgh, June 30th. After spending about a week in that capital they proceeded to Lanark, at which place the cotton-mill establishments then conducted by Mr. Dale, are described with great minuteness by Mr. Clarke in his journal ; thence by the falls of the Clyde to Glasgow, Lochlomond, Inverary, and Greenock. At the latter place, they embarked on board the revenue cutter, which, as has been stated, was placed at their disposal ; and sailed to the Isle of Bute, to Arran, the

Cumrays, and Lamlaash. Mr. Clarke's description of the Crag or Island of Ailsa will be given in his own words.

Extracts from his Journal.

"July, 1797.—The next morning we reached the Crag of Ailsa, a stack of Basaltic columns, rising out of the sea, at the distance of fifteen miles from any land. Former authors have spoken of a part of it as being basaltic, who probably had not opportunity to examine the whole of it. I paid the greatest attention to every part of this remarkable rock: went all round it, and ascended to the top. I found it to consist entirely of a stack of basaltic columns, covered in a few places with a slight vegetation of brakes, nettles, and a little elder.

"But what renders this rock an object of general curiosity, is the swarm of birds which resort there in the summer months to breed. I know not how to give my readers a more adequate idea of this rock, and the appearance it makes, with the prodigious flight of birds which hover round it, than by comparing it to a beehive, surrounded with swarms of bees, which will afford them a miniature model of the rock itself, and its numerous inhabitants. On no account let a traveller omit visiting this wonderful place, whatever delay, fatigue, or difficulty he may encounter in procuring a sight of it. It will fully answer any expectation this description of it may excite.

"We approached it on the water side. Immense pillars of unequal lengths, disjointed, subverted, and in many respects like the columnar phenomena of the Giant's Causeway, except in the irregularity of their horizontal fissures, rose vertically out of the sea, forming an abrupt and lofty precipice. On the top of all these pillars, and wherever their broken shafts afforded the smallest resting place, innumerable birds stationed in rows, one above another, like spectators in a crowded theatre, were seated on their nests. Flocks of Solan geese hovered round the boat as we drew near the rock. Levelling my gun at one of these, I brought him headlong into the water. The effect of the report my gun made, beggars all description. The instant the sound was heard, all the aerial inhabitants of the rock, with a noise not to be described, poured down from the precipices above us, and darkening all the air, roared like a torrent over our heads. The body of the bird I had shot, attracted all the Solan geese from this immense crowd of birds, who hovered round it screaming,

and in so vast a throng, that had we remained to shoot at them, our boat would not have contained the numbers of the dead. Having with difficulty effected a landing, for the surf broke with violence over its bold and craggy shore, we entered a spacious cavern, the extent of which I did not ascertain, as I had no torch with me, and could not see the end of it: here we found the nests of several birds, who suffered us to take both themselves and their young ones with our hands. We now began to wind round the cliffs with a view of getting to the other side of the rock, in order to ascend the top. Several beautiful birds, usually denominated by sailors the Ailsa cocks, were taken from the rocks by the sailors with their hands. Every time a gun was fired, the torrent as before poured from the precipices; which I can compare to nothing but a prodigious cascade of water, bursting suddenly from the rock, and foaming in an arch over our heads.

"Having effected a passage to the south-east side, one of the sailors offered to accompany me to the summit. Whoever has read Mr. Pennant's account of the difficulty he found in getting to the castle, will easily imagine what the undertaking must prove of climbing the precipices above it, to the summit of the rock.* Nor would I counsel those who come after me, to encounter so much fatigue and danger. The most beautiful part of the rock is that which presents itself below. The summit is only inhabited by a few rabbits, and about a dozen goats, which the present proprietor has placed there: however, it is necessary some one should make the experiment, that others may learn what they are to do. Few of the birds build their nests so high. The Ailsa cocks were seen in great abundance near the summit, but none of the other flocks. The manner in which the *cragger*, as he is called, takes these birds is curious. He sits on the side of a precipice with a wand of twelve or fourteen yards in his hand, and as the birds come out from their holes, he knocks them down with his wand. The young Solan geese are taken in their nests by means of a rope thrown over the precipice, to which a daring adventurer is suspended. Sometimes they will carry away two or three boat loads of them in one day.

"On the top of the rock, I found a heap of stones to mark the highest point; piled up, I suppose, by some former ad-

* Mr. Pennant says, "The path is narrow over a vast slope, so ambiguous that it wants but little of a true precipice. The walk is horrible, for the depth is alarming." Pen. v. ii. p. 191. The height of the Crag of Ailsa is mentioned by Macculloch to be 1100 feet.—Ed.

venturer as a testimony of his prowess. Near the summit is a spring of delicious water, as transparent as crystal.

On the south-east side are the remains of some ancient edifice: but whether of a church, a castle, or a prison, is hard to determine. It stands about one-third of the height of the rock, above the sea. It is a square tower, and what is very remarkable, the corners are all large blocks of freestone, brought I believe from the Cumrags, but how raised to their present situation, is a question that will perhaps remain for ever undecided. On one of the corners, I observed a sculptured bass-relief, representing three *fleurs-de-lis*; no inscription of any kind to be found upon it. The natives of the neighbouring shores have a tradition that it was formerly used as a state prison; a purpose for which alone its situation seems calculated."

From the island of Ailsa they directed their course to the coast of Ireland; and, after tracing the basaltic appearances along the line of that coast, they arrived at the Giant's Causeway. From this point, the narrative of their tour shall be carried on from Mr. Clarke's journal; after premising, that his description of the last mentioned natural curiosity appears, from some cause or other, less perfect than might have been expected.

"The long boat in a few minutes conducted me to the Giant's Causeway, a spot which, of all others, I had long possessed the most ardent curiosity to behold. Whether it was owing to the height of my expectations, or any misrepresentation of the scene itself, I know not; but I found the spectacle unequal to the idea I had formed of it. In the first place, the whole of it was lying below the cliff, on the shore; whereas I had always been taught to expect a gigantic appearance, extending the whole way up the cliff. Such were also the sentiments, and such the sensations, of my companions: but they continued only while the cause of them remained at a distance, for upon our arrival, whatever mistaken notions we might have formed of the Giant's Causeway, it presented us with a scene more truly astonishing than any thing I ever saw before in my life.

"The reader has, perhaps, often received an account of this marvellous place. If not, let him imagine an assemblage of pillars of such unequal lengths, that the top of one may serve as a step to the next, and thus a regular gradation, formed by—

their broken shafts, conducts you from the sea shore to the highest point of the whole group. These pillars are neither round, square, pentagonal, hexagonal, septagonal, nor octagonal, but all of them together; that is to say, there may be found some of every description. The pentagonal are the most numerous. They all consist of different stones, laid horizontally with the greatest evenness one above the other. Their sides and angles correspond with the minutest accuracy. Thus it will be seen, that if the pillar is a pentagon, the different stones which compose it will also be all pentagonal, and the diameter of every stone will be the diameter of the pillar to which that stone belongs. I found the greatest diameter of the largest stones to be generally one foot ten inches, and their thickness eight inches. The number of stones on one of the tallest pillars was twenty-one. This would make their greatest height fifteen feet nine inches. A part of their shafts are buried in the soil and loose fragments which surround their bases; but as near as I could determine the average height of the tallest range of pillars, they rose from twelve to twenty feet above the level of the sea.

"In general, the pillars, in their relative situation to each other, resembled the cells of a beehive; but there were some exceptions equally singular and beautiful, in which a group were ranged in perfect order round a principal pillar, which formed their centre. And thus the appearance of the stones at their tops was like the radii of a circle. But even in this group the pillars did not all correspond either in the number of their sides, or the number of the stones that composed each pillar, although in every instance the texture and character of the stones in the same pillar were precisely the same. The greater part of these stones are on one side convex, and on the other concave. But this is not universally the case, there are many which have both their sides concave, and again others both convex."

"The wind being favourable for the sound of Ila, we hoisted all our canvass, and sailed with remarkable expedition to White Foreland Bay, where we cast anchor off the Paps of Jura. The conic form of these mountains attracted my notice from the summit of Goatfield in Arran; and being very desirous of knowing whether any crater-like appearance could be found upon their tops, I ordered the long boat to be manned, and taking two of our crew, who were acquainted with the island, began to ascend the largest of them.

"The approach to the Paps on this side of Jura, is excessively toilsome and difficult. We had near four miles of a pathless morass to traverse, before we reached the base of one

of them. At every step our feet sunk in mire, or were caught by entangling heath. The journey up the cone itself, is very like the ascent to the crater of Vesuvius, and equally steep. We found it also necessary, as upon that mountain, to crawl occasionally upon all-fours over loose stones, which sometimes giving way in a mass, brought us many yards below what we had been a quarter of an hour labouring to surmount. Perseverance and a little whiskey, at last brought us to the summit, 2476 feet above the level of the sea.* Here we found a large heap of stones, as upon Goatfield, to mark the highest point; which must have cost the persons who erected it, no small degree of labour. On the top of this pile in a bed of moss, was placed a bottle; with the names of those who erected the pile, engraved with a diamond pencil. From the inscription, it appeared that some of them were natives of Orkney.

"We now stood at a vast height above the clouds, which were rolling in white masses, like enormous bales of cotton, below us. Over these clouds we perceived distant islands, bays, promontories, rocks, and mountains. And occasionally as they separated, we more particularly noticed Oronsa, Colonsa, the whole of Ila, rich in well-cultivated fields, with its several lakes, spread at different elevations in various parts of its green surface, and the whole extent of Jura, with its tall Paps, on the loftiest summits of which we looked down from the point on which we stood. In my journey down I remarked the desolate appearance of Jura. During the whole of our expedition, we met not a human being, nor hardly a single animal, except a few sheep, about half way down the mountain. In some parts of the island a person may travel sixteen miles without seeing a single cottage. Upon the moor below the Paps there is said to be abundance of black cocks, and other game. Wild deer are also found upon the heights.

"At four in the morning we hoisted sail, and clearing the sound of Ila, left the islands of Oronsa and Colonsa to the north-west; the wind not permitting us to land there, but blowing favourably for the sound of Mull, we steered our course north-east, and passed the dangerous gulf of Corryvreckan, which we saw between the northernmost point of Jura, and the isle of Scarba. With the flood tide, a strong eddy surrounds the north-west coast of Scarba. The whole passage in the neighbourhood of Corryvreckan is pregnant with dangers. Its extraordinary tide, rocks, and whirlpools.

* The hills called the Paps of Jura, are three in number, not varying much in height, and generally about 2500 feet above the level of the sea. See Macculloch's v. ii. p. 183.

render it a hazardous sea for mariners unaccustomed to explore it. In spring tides, and with the flood water, the most experienced pilot would not be able to enter the gulf, even in a long boat. But during neap tides the merchant vessels frequently go in and out. The island of Scarba has been long famous for the longevity of its inhabitants. De Foe mentions a woman who attained there the age of 140 years.*

"Proceeding in our course, we passed Long Island, with the Maze and Eysdil isles; saw also the north coast of the island of Loing, presenting a bold and rocky shore; also the islands of Seil and Kereray, all lying on the north-western coast of Scotland, in Argyle. The islands of Long† and Loing, together with the isles of Eysdil, which include, under one general appellation, the small isles of Balnahua, Blada, and Dusken, are all famous for their fine quarries of slate, which is exported to Greenock and Port Glasgow; and from thence frequently conducted up the canal to Leith and Edinburgh.

"A favourable gale still conducted us with uncommon expedition to the island of Lismore, extending in an oblong form from north-east to south-west. Beyond the north-eastern extremity of Lismore is Lochabar, celebrated in old Scotch songs. A fortress, erected there for the purpose of overawing the Highlanders, is still kept up. A small rock, called the Lady Island, was pointed out to us, which is covered by the sea at high water. Opposite the Lady Island is Loch Don, a harbour in Mull, to which ships frequently repair in unfavourable weather, to wait for a change of wind. Below Loch Don is Loch Spelio, another harbour of the same nature, the entrance to which is narrow, and the water too shallow, unless at high tide, for cutters to go in and out. There is also another consequent inconvenience attending it, that without a leading wind, no vessel can effect an entrance or secure a retreat.

Below Loch Spelio, at the southernmost point of Mull, is another harbour, called Loch Buy (signifying in Gaelic the Yellow Loch or Bay,) of which the islanders have a saying, that it is the finest loch in the island, for if a vessel once enters, she never goes out again. The Laird of *Loch Buy* was formerly the second landholder in the island. His possessions were only inferior to those of the Argyle family, and amounted to 1700*l.* a year, an immense property in such a place as Mull. The estates are now fallen to a distant relation of the

* Tour through Britain, vol. iv. p. 289.

† Called Langa and Laing by Macculloch.

late Laird of Loch Bay, who got his death in consequence of a dispute about the best method of cutting up a duck. He had been in the American war, and returning from New-York with laurels worthy of his illustrious clan, was coming to reside once more upon the territories of his ancestors. In his passage home, a dispute arose about the properest method of carving a duck, which ended in a duel, and the last descendant of the chieftains of Loch Bay fell a victim upon that occasion. The father of this young man was the identical Highland Laird, mentioned by Dr. Johnson (*Tour to the Heb.* p. 358,) as 'rough and haughty, and tenacious of his dignity.' But Dr. J. has not thought proper to represent accurately the conversation that passed between them. I suppose his pride was too much hurt to permit so strict an adherence to candour; since, I believe, no one will suspect him of a wish to soften any harsh features in the characteristics of the natives with whom he conversed. Loch Bay, according to the usual custom among the Highlanders, demanded the name of his guest; and upon being informed that it was Johnson, inquired '*Which of the Johnstons? of Glencoe or Ardnamurchan?*'—'Neither?' replied the Doctor, somewhat piqued by the question, and not a little sulky with the fatigue he had encountered during the day's journey. '*Neither?*' rejoined the Laird, with all the native roughness of a genuine Highlander, '*then you must be a bastard.*'

"Altering our course from the Lady Island, we steered north west, and passing Castle Duart, entered the sound of Mull, between Macallister's Bay, and the point of Ardimridder. The whole passage up the sound is very fine. On one side rises the country of Morvern, so celebrated in the songs of Ossian, and on the other, the undulating hills and healthy vales of Mull. Not feeling that internal evidence which the admirers of Ossian profess to entertain, respecting the authenticity of those poems, and having ever regarded them as an ingenious fiction, blended with a very scanty portion of traditional information, I could not, nevertheless, avoid feeling some degree of local enthusiasm, as I passed the shores on which so vast a superstructure of amazing but visionary fable had been erected. Mouldering fabrics, the undoubted residence of valiant chieftains in days of yore, were seen both on the coast of Morvern, and upon the opposite shores of Mull.

"Beyond Artonish castle we saw, on the Morvern side, Loch Alin, famous for the residence of the celebrated Jenny Cameron. Mr. Ritchy, our first mate, remembered her well, and once visited her in her own house, which stood at the head.

of Loch Alin. At that time she was become very corpulent, but preserved the traces of former beauty in her countenance. A vessel of oat meal, her property, lay at that time in the Loch, the master of which would not sell any of it without her consent. Mr. R. having occasion for three bolls of it, went to call upon her. He found her in a cottage of twisted osiers, or wicker work, neatly wainscotted on the inside. She courteously invited him in, but when she knew his errand, would not give an order even for so small a quantity of oatmeal, until she had first received the money; a proof at least, that Miss Cameron's disposition was a little tinged with avarice.

"Still sailing up the sound, we afterwards passed the castle of Aross on the side of Mull, and passing round the little island of Calay, or Calve, we anchored in the bay of Tobermorey.* This harbour is from sixteen to eighteen fathoms deep, and is much frequented by vessels coming from the north or south, which are sheltered from storms, and wait here for favourable winds. The harbour itself is very like Milford Haven, in Pembrokeshire, though not so large. It appears completely land-locked, and resembles a beautiful lake, with several small but pleasing cascades, falling into it from the hills above. But what has given Tobermorey a sort of local celebrity, arises from an accident which befel the *Florida*, a Spanish man-of-war, belonging to the *invincible* Armada, which was sunk in this harbour, after the dispersion of that fleet, in the year 1588. Several persons have been frequently employed with diving bells, in raising the guns and other valuable effects belonging to her. A part of her stern served for many years as a staircase at the landing-place, before the present quay was built. A part of it lay neglected upon the shore when we arrived, which was somewhat diminished before our departure, from the desire we all felt to possess a relic of so curious a piece of antiquity. The master of a herring buss, who resides in the village, saw us employed in sawing off a part of it; and assured us, he was present when it was raised from the bottom of the harbour. Mr. Campbell, comptroller of the customs, assisted us in taking it away, and I recommended

* "I find no less than four different modes of orthography respecting this bay, in Johnson, Pennant, Mackenzie's Maritime Survey of Great Britain and Ireland, and the large map of Scotland by Ainslie. The first of these (Johnson) writes it *Tobor-Morar*; the second (Pennant) *Tobir-Moire*; the third (Mackenzie) *Tobermarey*; the fourth (Ainslie) *Tobermorey*. The name is a compound of two Gaelic words, signifying in their original import the *Well of Mary*, or *Mary's Well*, from a well dedicated to the Virgin Mary, situated upon the hill, just above the village."

him to place the remainder in some place to secure it from being used as a substitute for peat, by those who might prefer a wood fire to one composed of turf; as future travellers may by that means be enabled to obtain a portion of it, if any should come after me sufficiently influenced by local enthusiasm to appreciate such a relic.

"The village of Tobermorey owes almost its present existence to the establishment, which has been raised here by the British fishery. A few tolerable houses, erected upon a modern quay, constitute the whole of what is there denominated *the Town*. A small quantity of whiskey is made there, and some few of the inhabitants of the cottages above the village are employed in dying woollen plaids for their own use.

"Soon after my arrival, Mr. Campbell very obligingly accompanied me to the heights above the town, from whence there is a beautiful view of the harbour. The small spring from whence the place derives its name, was also pointed out to me. It is situated in a potato ground, overgrown with weeds and long grass: of late years it has altered its course, owing, as the inhabitants relate, to the following circumstance. In the year 1745, when some soldiers were quartered here, a camp was formed near the spring, the raised works of which, though indistinct, may still be traced. Some of the soldiers belonging to the camp washed their linen in the spring, at which impiety, the natives declare, the water was so offended, that it never flowed afterward in the same channel.

"The superstition of the inhabitants, not only of Mull, but of the neighbouring islands, is beyond belief. Stones of any singular form, which have been probably originally found upon the beach, have each a peculiar characteristic virtue. They are handed with veneration from father to son, and esteemed as a remedy for every species of disease incident to the human or animal race. As there is not in the whole island of Mull a single surgeon or apothecary, it is well for the natives they can have recourse to a mode of relief so universal and so efficacious. Imagination is sometimes found to create, as well as cure distempers, and it is reasonable to conclude, among people who are ignorant of half the maladies to which mankind are liable, that instances will often occur where the disease and the antidote originate from the same source. When I expressed my surprise that the inhabitants of a whole island, cut off from all immediate connexion with the main land, could possibly exist without a hope of medical assistance in cases of sickness, or accidental malady, the reply I received was—'What could the people of Mull have to do with a *doctor*? They are never sick, and of course do not stand in need of physic!'

"It was with much difficulty I could prevail upon these credulous quacks to part with any specimen of their potent charms. I succeeded, however, in purchasing two, during the time I remained in Mull. One of these, a hard and polished stone, evidently appears to have been once used as an axe, or hatchet, and bears a strong resemblance to the specimens of similar instruments brought by circumnavigators from the South Sea Islands. The other is of the same nature with the first, with respect to the use for which it was originally fabricated, although it differs in its composition: it was probably once an instrument of war. By holding the former over the head of any diseased cattle, and pouring water upon it, letting the water at the same time fall on the animal, the beast is said to recover without fail. The latter is a sovereign remedy against barrenness in cows, if it be used in the same way. If either of them be dipped in water, the water cures all pains of the head or teeth, it also removes the rheumatism or sprains in the joints, with a variety of other virtues, too numerous to mention. Several others which I saw, possessed virtues as various as their forms. Some of these were fossil shells: others like the flint of a gun, called *Fairy speds*; and again, others, mere oblong pebbles, which they distinguish by the appellation of *Cockaroo-hoopan*,* a sovereign antidote for barrenness in the female sex.

"After ascending the heights above the village, I went to see *Bloody Bay*, so called from a famous battle which took place there. From the cliffs above *Bloody Bay* you command a fine view of the mountainous promontory of *Ardnamurchan*. Its shores are bold and craggy, its sides rough, irregularly broken and almost destitute of cultivation. Among a small group of trees, in our way to these cliffs, we saw the house in which *Dr. Johnson* was so agreeably entertained by a *Miss Maclean*, whom he has favoured with one of the very few compliments he ever bestowed upon those who exerted their hospitality to entertain him.

"In some bogs above *Bloody Bay*, we observed abundance of the wild cotton plant, which thrives in most of the Scotch morasses, and seems to prefer those bogs in which peat and heath are found. I cannot but imagine the cotton of this plant might be rendered a useful article of commerce if it was properly cultivated, and submitted to manufacture. A native of the *Cumray* isles collected a sufficient quantity to make him-

* Written as it is pronounced.

self a bed ; and from the description he gave of it, it equalled the finest eider down.

“ We proceeded the following day into the interior part of the island. Its surface presented a wild and melancholy view of extensive heaths, covered with small black cattle, but almost uncultivated. Not a town or a village was to be seen ; excepting Tobermorey, and the houses of a few Highland Lairds, situated on the coast, there is nothing but huts to be seen over the whole island. I entered several of these huts, which are even inferior to the generality of poor cottages in Wales. Their interior represents the most abject state to which human nature, by poverty and barbarism, can possibly be reduced. The pig-sties of England are palaces to the huts of Mull ; because the former admit at least the fresh air, to which the latter are entirely strangers. But if any one imagines happiness and contentment are strangers in these receptacles of abomination, they are much deceived ; so relative is all human felicity. Surely, if any thing can teach mankind the golden lesson of being contented with a small and peaceful competence ; it is the spectacle of unfeigned satisfaction amidst poverty and want, such as this. It has been matter of surprise to me, that a man of so powerful a mind as Dr Johnson could have derived a source of spleen from the contemplation of such scenes. We do not visit the Hebrides to see stately palaces, and groves of citron, but to behold uncultivated nature, in the shed of the Highlander, or the solitude of mountains. Hitherto disappointment has been a stranger in my path. I found the untutored natives such as I expected them to be, and in their miserable mansions received a lesson of contentment, which future impressions will never be able to obliterate.

“ I found in one of these huts a family of thirteen persons, assembled beneath the same shed. In the middle of the room was a fire of peat, the smoke of which, after filling every part of their abode, made its escape through a hole in the roof. The floor was the bare earth, and at that time some inches deep in mud. Some dry brakes and heath round the outside formed a general bed for nine children, their father and mother, and grandmother, and a wretched female about thirty years of age, who had all her life been an idiot, and whom they harboured in charity. On the same bed slept also two cur dogs, a cat, three kittens, and a pig. Some transverse poles in the thatched roof supported a few chickens, that came down to be fed with the family, and roosted over their heads. Before the door, the father of this family was employed in making heather cables ; a sort of rope made of twisted heath, which they use in thatching their huts, and as cables to their boats in fishing.

The old matron within was boiling herrings' guts for oil ; which served to supply their lamp, and to dispose of. The children were singing and carding wool, the rest slept, and their mother sat at the spinning wheel.

"On the morning of the 21st July, about nine o'clock, we left Tobermorey Bay, the wind full in our teeth, and after a whole day spent in tacking, were unable to make the harbour of Col, but lay all night rolling off the mouth of it. Soon after we left Tobermorey, passing the mouth of Loch Sunart, we observed on our right the castle of Mingary, an octagonal tower standing by the water's edge on the coast of Ardnamurchan. The view which opens after leaving the sound of Mull, is both extensive and interesting. It is such a scene as one would witness in the *Ægean*. The sea is every where spotted with Islands, which increase in number upon the eye as you approach Col, from the point of Ardnamurchan. We observed to the north, the islands of Muck, Egg, Rum, Canna, and the hills of Sky appearing between them. Looking west, we saw Col spreading its black and desolate rock before us, with part of Tirey, less distinct and more distant. Turning our view to the south, the Treshannish isles, Staffa, Icolmkill, and the southwestern shores of Mull, seemed to extend in one line, though placed at such various distances, and so irregularly situated respecting each other. Approaching nearer to Col, we commanded a view of its whole extent ; it seemed a ridge of low and naked rocks, without a single acre of cultivation, except one or two small patches of potatoes.

"Saturday morning, July 22.—Entered the harbour of Col, under the Laird's house. Landed, and proceeded to the top of Ben Fiol, to take a view of the whole island. There is very little appearance of cultivation. The island is a ridge of low bleak rocks, chiefly quartz. While we were on Ben Fiol, they pointed out to me what they called a town, at the foot of the hill ; I looked attentively, and saw several heaps of straw like a cluster of ant-hills. We descended immediately to examine this curious town. It was built much after the plan mentioned by Tacitus, which was practised by the ancient Germans, and consisted of about twenty extremely small huts, put together without order or form, not in streets, or straight rows, but standing in all directions, every one placing his hut according to his fancy. The huts of Col appeared to me the most curious things we had seen. There are several of these towns or villages in the island, looking much like the towns in the South Sea Islands, as represented in Cook's Voyages. Any of these islanders will build his house in two days : 'tis only making a circle of stones, and covering the top with

straw. It is not exaggeration, when I declare, a stranger might walk over the island, without even perceiving them. I could not help calling to mind the island of Lilliput, and the mode in which Gulliver extinguished the flames. It is inconceivable how a race of men, so healthy and so sturdy as these islanders, can be brought up in such huts as these. I crept into several of them, by a little aperture or perforation in one side, which serves for a door, and which barely admits a common-sized man stooping, without having recourse to all-fours. I found the inside of all of them, without exception, entirely filled with smoke, which endeavoured but in vain to escape by means of the door, and through several accidental fissures in the roof. It was a sultry morning in July, notwithstanding which, in the midst of this suffocating cloud, half viewless, a group of nondescript beings, squatted on their haunches, were surrounding a peat fire, without any other apparent object in contemplation than the effect of such an atmosphere upon each other's visages.

"Returning to the vessel, we were accosted by Mrs. Maclean, wife of the Laird of Col, who kindly invited us as strangers to pass the day in her house. Her brother, hearing of our arrival, had gone in search of us; but, as we took a different route in our return, we missed him. He soon came in, and apologized for not sending the boat off the last night, but seeing us not enter the harbour, it was concluded we did not mean to touch at the island. The proverbial hospitality of this worthy family has been rendered sufficiently public by the writings of Johnson and many others. They make a rule to send an invitation on board any vessel, the moment she enters the harbour, and keep a light burning in the upper part of their house all night, as a guide to boats which may wish to enter. I was happy to be in company with a brother of the young man, so much noticed by Johnson. Falling into conversation with him on the subject of cairns, he informed me, there was only one in the whole island, called *Cairn mich Re*, signifying the cairn, or tomb, of the king's son.

"I thought this would be a very favourable opportunity for putting in practice a plan I had long had in agitation, of opening one of these cairns; and expressing a wish to that effect, Mr. Maclean informed me he had often thought of doing it himself, and if I pleased, we would set out for the spot immediately. Having provided a sufficient number of the islanders with spades, a pick-axe, &c. we proceeded about three miles across the island, to the spot mentioned by Mr. M. I found here a small cairn by the road side. It is situated near the village of Grissipol, in the north part of the island. We

soon fell to work, and made a rapid progress, endeavouring to perforate the cairn, by opening a channel from east to west. While we were thus employed, a venerable figure, with hairs as white as snow, came slowly up to the cairn, shaking his head, and muttering something in Gaelic, which I did not understand. Mr. Maclean interpreting for me, told me he said 'it was unlucky to disturb the bones of the dead !' As soon as he heard the voice of his young Laird, he seized his hand, and kissing it, eagerly poured forth blessings upon every member of the house of Col. Mr. M. informed me that his age already exceeded a hundred years, and he still continued to work, with the perfect use of all his limbs and faculties. He begged hard for some snuff, and as soon as he obtained it, began to sing a Gaelic song. It was an historical ballad, relating the death of one of the ancestors of the Maclean family, who had been drowned, and concluded with an account of his exploits, his courage, and an eulogium upon his character and benevolence, foretelling the future honours of his race.

"I am sorry to add, our labours at the cairn were not productive of much information. We discovered nothing ; but in casting out the stones, I found several of that description of stones which are venerated in Mull for their imaginary virtues : also several specimens of beautiful black mica. Mr. M. said, and I believe with truth, that cairns were not erected merely where a person was interred, but often to commemorate the spot on which he died ; and also at all the places where his body rested, from the place of his death to the place of his interment. The old man informed us, he remembered the time when at any common funeral in Col, if the body was carried by that cairn, every one of the attendants cast a stone upon it. It is an expression of friendship and affection, at this hour, among the islanders, to say, 'I will cast a stone upon your cairn !'

"Finding our labour ineffectual, we left our work, and returned to Mr. M.'s house. In our road, I saw several upright stones, particularly two, called the whispering stones,* which they call the giant's grave, and also evident traces of ancient cairns ; all of which, though hardly noticed by or known to the natives, bear strong marks of monumental labour. On the top of Ben Haugh, is a large stone, placed on four others, resembling what is called a cromlech in Wales. Upon the sea shore at the southern point of the island, is a remarkable vein

* "So called from a silly trick, practised by the natives, of placing a person behind one of the stones, pretending he may hear what is whispered at the other, and having thus stationed him, he is left a dupe to his own credulity."

of the purest lead ore, which runs into the rock. It is very extraordinary no person has undertaken to work it. I saw specimens of it at Mr. M.'s, and was informed blocks of the ore, amounting to twenty or thirty pounds in weight, had been frequently taken from them by mere curiosity.

"The whole island of Col does not, as is erroneously supposed, belong entirely to its Laird. The Duke of Argyle has a farm at each extremity of it. These farms were originally church property; and, the Argyle family at the Reformation obtaining a grant of all the church property in Argyleshire, this part of it came into their possession. Geographers have frequently erred in marking a bay, which they call Loch Chaad, near the south point of Col. There is no such bay whatever.

"The neighbouring island, Tirey, is separated from Col by a small sound, about three miles and a half across, at the west end of which lies the small island of Cunna, fertile, but uninhabited, belonging to the Duke of Argyle. The island of Tirey is not so much intersected by rocks as that of Col. It contains more arable pastures; but what crops there are in Col, are esteemed superior to those of Tirey. The cattle of Tirey are of little or no estimation, from this remarkable circumstance; they have no heath on the island, and the cattle by feeding constantly on a fine luxuriant grass, immediately die when taken to the coarser food of the neighbouring isles. For this reason, the cattle bear no price out of the island, and the inhabitants, unable to sell them, suffer from being blessed with too luxuriant a soil. The riches of Tirey consist in the vast quantities of fine kelp, which is manufactured there. It has also a marble quarry, which was opened at the instigation of the celebrated German naturalist, Mr. Raspe, who spent a great deal of time among the islands of the Hebrides; but being found to yield no blocks of sufficient size, the progress of working the quarry has been discontinued.

"There is also a beautiful plain in Tirey, perfectly flat, and covered with verdure, five miles long, and three or four in breadth. The soil is full of marine shells, and from the appearance of its natural embankment on either side of it, there can be no doubt that it was originally covered by the sea. There is a plain of the same nature, but much smaller, in Col, formed apparently in the same manner. The waves of the sea having forced up a bank of sand to a great height, across a narrow opening between two hills, have ultimately created a natural boundary to themselves, and left a dry plain on the other side of the bank thus raised. Ancient coins are frequently found in the island of Tirey. I am indebted to Mr. Maclean's family for two of them.

"I cannot take my leave of Col, without expressing a sense of the obligation I shall ever feel for the liberal hospitality experienced in the mansion of its Laird. We were utter strangers to the family, and entered their house as wanderers, without any recommendation, and were received not only with a hospitable welcome, but treated with a degree of magnificence during our stay upon the island, which might have done honour to the noblest houses in Great Britain. To heighten our satisfaction, Mr. M. himself, with the same zeal which his amiable but unfortunate brother* showed to Dr. Johnson and Mr. Boswell, offered to accompany us for the remainder of our voyage; and from his general acquaintance with the principal families of all the islands in the Hebrides, we derived a passport to every thing worthy of notice among them.

"On the morning of the 23d we left the harbour of Col. Contrary winds, and much rain; in six hours' time, at one o'clock, cast anchor in the sound of Icolmkill. In our passage the view we obtained of the Treshanuish isles and of Staffa was very fine. As we cast anchor, the numerous and extensive ruins of the cathedral, the monastery, and the tombs of Icolmkill, attracted all our notice. Being extremely impatient to land, the long boat was ordered out, and we hastened to set our feet on an island, rendered illustrious not only on account of its ancient celebrity, but in having called forth from the pen of Johnson, the most beautiful specimen of English composition that can be found either among his writings, or in the language it adorns.

"As we approached the shore, such a degree of sympathy prevailed among us, that every one of our party had it uppermost in his mind, and the moment we landed, no less than three of us broke forth in the following words:—'We were now treading that illustrious island, which was once the luminary of the Caledonian regions, whence savage clans and roving barbarians derived the benefits of knowledge and the blessings of religion. To abstract the mind from all local emotion would be impossible if it were endeavoured, and would be foolish if it were possible. Whatever withdraws us from the power of our senses; whatever makes the past, the distant, or the future, predominate over the present, advances us in the dignity of thinking beings. Far from me and from my friends be such frigid philosophy as may conduct us, indifferent and

* He was drowned, a few months after Dr. Johnson's departure, off the rocks of Col; owing to a sudden squall of wind, which, in the midst of a total calm, overrode the boat in which he was returning to the island. This happened between Ulva and Loch Kenneth. See Johnson's Tour, p. 338.

unmoved, over any ground which has been dignified by wisdom, bravery, and virtue. That man is little to be envied, whose patriotism would not gain force upon the plain of Marathon, or whose piety would not grow warmer among the ruins of Iona.*

"However fervently we might have been impressed with the enthusiasm thus beautifully described, these emotions were speedily succeeded by feelings of a very opposite character. We found ourselves surrounded by a crowd of the most importunate and disgusting objects I ever beheld. Bedlam, disgorge of all its inhabitants, could hardly have presented a more dismaying spectacle. Close and directly opposite to me, a miserable idiot grinned horribly in my face; while on my right hand a raving lunatic, seizing my elbow, uttered in my ears a loud and fearful cry. Here a wretched cripple exposed his naked sores; there a blind and aged beggar besought pity on his infirmities. All the warm feelings excited by the ruins of Iona, or the retrospect of its former glory, were in one moment obliterated. It seemed the hospital of the Hebrides, a general infirmary, for the reception of every malady that could afflict human nature. This spectacle was rendered more remarkable by its singularity. The other islands we had seen were peopled by a sturdy race, among whom disease and sickness appeared seldom to find a victim. Age, or accidental calamity alone, conducted their natives to the grave; and even age became an object of admiration, preserving beneath its silver locks, the glow of health, and limbs unbent by the pressure of accumulated years. The Western Islands hitherto appeared the residence of health and vigour; the Highlanders were as the sons of Hercules, and their damsels as the daughters of Hygeia. But here seemed to be a concentration in one general mass of every description of infirmity, disease, and wretchedness. A few trifling donations soon dispersed the major part of this melancholy assembly; all but the madman, whose afflicted mind no gratuity could gratify, no commiseration alleviate, and with whom no entreaty would avail. A tattered plaid but ill concealed the filth and nakedness of his body. Sometimes trampling down with his bare feet the weeds and nettles that obstructed our path, he imagined himself our cicerone, pointed out among the ruins the sepulchres of the kings of Scotland, or led me aside to whisper where the long-forgotten tomb of some ancient chieftain was secretly concealed. As he spoke in Gaelic,

* "Johnson's Tour to Hebrid. p. 346."

his incoherent rhapsodies were fortunately attended with little interruption to our researches. It was only by means of an interpreter, who officiously explained his observations, when, with more than usual eagerness, he endeavoured to attract my notice, that I became enabled to comprehend any thing he said. What surprised me was, to find that at some moments, as if in a lucid interval, he repeated rationally the unreasonable traditions and superstitions of the place. A small stone coffin of red granite lay among the broad leaves of the Burdock,* at the west end of the cathedral. The poor lunatic had torn away the surrounding foliage, and insisted upon my noticing it. 'If you want a north wind,' said he, in a whisper, 'bring a virgin of eighteen, whose purity has never been suspected, and bid her wash this coffin.† Then, when the virgin works, you'll hear the north wind roar!'

"The curiosities of Icolmkill have been so copiously and so ably detailed by other writers, that it would be superfluous to repeat what has already been so accurately described.‡ I shall, therefore, only add to their accounts such remarks as appear to have escaped their previous observation. The first impression which the sight of these ruins made upon my mind, was as to the grandeur of their superstructure, when compared, not only with the few public edifices which were known in Scotland at any former period, but even with those which now remain of modern origin. When it is doubted,§ whether the kings of the neighbouring nations were or were not interred in this island, I can discover no rational argument for skepticism to set aside the validity of a tradition, long established and implicitly admitted from generation to generation by a people among whom the testimony of oral record is almost the only basis of history; how are we otherwise to account for such magnificent edifices erected on a spot destitute of all local resources, and which could only derive its original importance from some intercourse with distant opulence and exotic power, arising from the superstitious veneration which the nations of the north entertained for an insignificant and other-

* "The Burdock flourishes among the ruins of Icolmkill, with a profusion as singular as the size to which it grows. I measured one of the largest leaves, and found it to be two feet seven inches long, by three feet wide.

† "This traditinary superstition is implicitly believed among the natives of the island. When this remark of our mad antiquarian was explained to me in English, the rest of the inhabitants who were assembled round him, assured me that what he had said was strictly true. The same tale respecting this coffin, was repeated to the rest of our party, by others among them, who had no mental derangement to apologize for the weakness of their reason in this respect."

‡ "Vide Martin, Pennant, Johnson, &c."

§ "Johnson, 352, 353."

wise obscure island in the Western Ocean. The tombs of Iona, at this hour, discover traces of expense and labour equal to any formerly bestowed on the mansions of her neighbouring chieftains, or the proudest palaces of Caledonian kings. How relative are the ideas of human grandeur. The primeval inhabitants of the north, who contemplated as the noblest effort of human labour, a pile of stones heaped over the body of a departed warrior, would have regarded as supernatural the pyramids of Egypt; while the Roman who had beheld the mausoleum of Adrian on the banks of the Tiber, could hardly believe he walked among the tombs of Norwegian monarchs, in the sepulchres of Iona. It is by comparing the works of past ages, with the manners, the power, and the resources, peculiar to the nations who erected them, that we can arrive at any accurate determination respecting the purposes for which they were constructed; and he who disputes the authenticity of Scottish tradition, respecting the ruins of Icolmkill, should first endeavour to ascertain whether any other purpose can be found to which they were appropriated. Let him contemplate the huts of the Highlanders, the castles of their chieftains, the palaces, if such they might be called, of their ancient sovereigns, and he will then admire the magnificence of the reputed cemetery of their princes. He must not expect to find the tomb of Cecilia Metella, over the ashes of a Caledonian princess; or even the pyramid of Caius Cestius, over the most potent sovereign of the north.

"The subjects on some of the bass-reliefs have all the simplicity of design and rudeness of sculpture, which characterized the earliest ages of Greece. Sometimes they represent a warrior on horseback, followed by dogs and an attendant on foot with a spear, as if engaged in hunting. Similar things were delineated on the most ancient of what are termed Etruscan vases, found in the sepulchres of Magna Græcia. On the frieze of one of the pillars belonging to the cathedral, we saw the portraits of Adam and Eve, calculated to vie with any of the monsters of Egyptian mythology.

"The subjects carved on the tomb-stones were as numerous as their forms and dimensions. On one of them we found the decapitation of John the Baptist, with Salome holding an ewer to receive the head. On others, sometimes only a long sword, like that of Col, and the sword of Wallace at Dunbarton. It is probable, that a chieftain who was renowned for wielding weapons of unusual size, might have his favourite sword represented on his tomb after death.

"We crossed to the side of the island to see the bay of St. Columba. There was great beauty and variety in the pebbles.

on the beach. We visited the marble quarries, opened and occasionally worked by the Duke of Argyle. The marble is very soft. This part of the island appears fertile: we observed plenty of black cattle and sheep. Returned by the village of Icolmkill to the French-Port, so called, because when the islanders once apprehended a French invasion, and had stationed sentinels in all parts, the alarm was first given from this bay. I could not find that the French had ever really landed in that bay. It is in the north-east side of the island. Close to the bay, where our men went for fresh water, is a remarkable block of hard red granite, of the kind which is generally called Egyptian granite at Rome. It lies upon a stratum of slate rock, with which it has no kind of connexion. One end of it rests upon a point of the rock, the other is supported by a smaller block of the same kind, so artfully placed under it, that one would swear it was done by hand. It is surely impossible that the sea could cast up such an enormous mass, and place it so artificially; and it appears equally incomprehensible how it could be brought there by human labour. I measured it, and found it to contain 144 cubic feet, which, allowing twelve feet of granite to a ton, makes the block weigh twelve tons.

"I forgot to add, in returning from the quarry we passed the Bay of Martyrs. Whenever the natives dig in or near this bay, they find human bones two feet below the surface. Six years ago, the Marquis of Bute, to ascertain the truth of this, ordered search to be made, and at two feet the bones were found in abundance. There is no account whatever of these bones on record, nor have the natives any tradition relating to them.

"Leaving Icolmkill, we passed Loch Scriban, and arrived at Staffa, of all worldly wonders the most wonderful. I will allow a stranger to this island to raise his expectations concerning it to the highest possible pitch, and will venture to foretell that the sight of it shall surpass them all. It is entirely a stack of pillars, like the rock of Ailsa, or the island of Canna. Several writers talk of the incumbent strata above the pillars: I believe this is only a decomposition of part of the pillars themselves. When I ascended to the top, I found the pillars in many places breaking through the surface, and visible all over its top in different parts. The cause which has also been given for the curved appearance of some of them is certainly erroneous. When I come to treat of Canna, I shall show that bending pillars are found in abundance, without any superincumbent weight to give them that form. Sometimes their sides lie horizontally to the earth, with their two extremi-

ties turned upwards. But surely it is absurd to suppose they took this form in cooling from the weight of the stratum above them. What stratum could be above them, when the matter itself was in fusion? If the stratum above the pillars of Staffa has accumulated there, it must have been after their original formation. The Giants' Causeway is but a wart to Staffa. Size of the largest stones, two feet seven inches long, three feet two inches wide, and from ten to fourteen inches thick; some much thicker: three fathoms water in the mouth of the cave.

"We entered the beautiful harbour formed by Canna and the Sandy isle; the surface of the water was unruffled as a small lake; sheltered on every side by the surrounding shores of Canna, Sandy, and the more distant but high lands of Rum and Sky. We observed extensive strata of basaltic pillars, rising one above the other, and visible over all the sides of Canna, and on the Sandy isle.

"On the morning after our arrival, July 26th, we took the long boat, left the harbour, and approached Rum. The approach is bold, with high precipitate cliffs, almost perpendicular, and yet covered with a green verdure, on whose fearful crags sheep were seen feeding. Behind these beautiful shores, the mountain of Oreval presents a semicircular, steep, craggy, and barren top, much like the summits of Ben Orrse, in Arran, offering to the view something very like the interior section of an inverted cone. At the bottom of this broken and irregular basin, a glen reaching to the sea, offered us a landing place. A few huts, with a small boat or two, drawn up upon the beach, constitute what the natives term one of their villages. The coast here is perforated and cavernous, like the shores of Sorrento in the bay of Naples.

"We landed near a farm, called Guirhl, or Gewdale, or as it is in Mackenzie's chart, Guaridil, and immediately several of the islanders came to welcome Mr. Maclean, the brother of their Laird. We accompanied him into the cottage of one of his brother's tenants, where we were regaled with new milk, oat-cakes, and Lisbon wine. I was surprised to find wine of that species, and of a superior quality in such a hut, but they told us it was part of the freight of some unfortunate vessel wrecked near the island, whose cargo came on shore.

"Two of the sons belonging to the old owners of the cottage afterward conducted us by a narrow path, along the north side of the island, over a frightful precipice, but in some measure divested of its terrors by the extraordinary verdure which covered its almost perpendicular crags, to a place called Scoar Mor, where a block of rock crystal of a ton-weight lay, which

fell about six years ago from the high mountain above the shore down upon the beach.

"As soon as we had descended among the rocks and loose stones near the sea, I found them to my very great pleasure and surprise, composed in great measure of the most beautiful fossils I ever saw. In a few minutes we walked over a sufficient quantity to supply half the museums in Europe. Our party were instantly employed in loading our handkerchiefs, hats, and pockets, with as great a load as we could carry, of agates, jasper, zeolites, crystals, spar, lava, and all kinds of Scotch pebbles.* We found immense fragments of a beautiful dark green stone, which the lapidaries of Edinburgh term green jasper, and estimate at a very high price. Some of it was marked with bright red spots, others with white; and in some we observed broad stripes of blue, red, or yellow.

"At length we came to the block of rock crystal, as the natives termed it. It is not a single piece of crystal, but a mass, in the various cavities of which, groups of the purest pyramidal diagonal crystals had found a matrix, like the Bristol stone, and of the same size as those usually are, only much harder, having sprung from a harder source. Hitherto it remained in all its beauty; no travellers having diminished from its splendour by injuring the points of the crystals, or breaking any part of it to carry away; and we left it as we found it, that those who should come after might enjoy a sight of so curious a production of nature. I climbed from the beach to the mountains above it; but found it impossible to discover from whence the block had detached itself. One discovery, however, paid me for my pains. I found several of the fossils we had met with upon the beach, in particular the zeolites and common Scotch pebbles, lying in their natural matrices, which proves that they are found originally in the island of Rum, and not cast on the shore by the sea, as we had hitherto supposed. I had suspected this a little before, as the specimens were of the first magnitude, and infinitely more beautiful than any we had seen in the other islands. From this it is easy to account for those at Icolmkill and Mull, which are found only in small quantities on the shore, and at spring tide after a turbulent sea, and which of course are carried thither from Rum, as no other island immediately in their neighbourhood produces any thing of the same nature. They are also always worn by

* A full account of the variety of beautiful minerals, which are found in the Isle of Rum, is given by Dr. Macculloch. See Description of Western Isles, vol. i. p. 497, &c.

the friction they meet with in their passage, and do not preserve their natural shape as at Rùm.

"Having completed our collection to the utmost that we could bear away, Mr. Maclean desired the guide to conduct us to a stupendous natural arch round a point of the precipice over which we had passed. Never did any of Nature's works impress me with higher admiration. I may venture to recommend a visit to this arch, to all travellers, as one of the most remarkable things they will meet with in the Hebrides. It is a fine subject for a painter. I know not how to describe it. It is such a scene as Salvator Rosa would have imagined in a moment of inspiration. Mortimer, in disposing his numerous banditti, would have here a scene capable of giving an awful dignity to the wildest flights of his genius. It is a mass or mountain of rock, cast into an enormous arch of the most perfect symmetry and happiest proportion in all its parts, through which is seen an overhanging precipice, with the sea and distant shore.

"Returning to Gaaridil, we found the old man, who received us at landing, waiting, with his bonnet in his hand, to request that we would honour his cottage with a short visit. Mr. M. conducted us in, when we were agreeably surprised to find a clean but homely cloth spread upon a board between two beds, which served us for chairs, upon which was placed a collation of cream, eggs, new-milk, cheese, oat-cakes, and several bottles of the fine old Lishon wine we had before so much relished. Here we entered into conversation upon the manners and customs of the Hebrides. I expressed an expectation, that some future day, however remote from the period of my own life, would find the natives of the western islands a great and powerful people, flourishing more in the arts of peace than during the most glorious annals of their warlike ages, when the clans lived at perpetual enmity with each other, and every Highlander considered the instrument of death as a necessary portion of his dress, and his protection during the suspicious moments of a doubtful and short repose; that foreign commerce would succeed domestic broils, and the scythe, the plough-share, the loom, and the fishing-net, succeed to the dirk, the lochaber-axe, the claymore,* and the target.

"That period would not be so remote as perhaps you imagine," said Mr. Maclean, "if there were less truth in the

* "The claymore was a large two-handed sword, many of which are still preserved by the chieftains, of an enormous size."

axiom admitted by Dr. Johnson, *that good cannot be complete, it can only be predominant.** A slight alteration in the excise laws, respecting the article of salt, would produce a very rapid change in favour of the Highlanders. For want of this necessary article, some hundreds of them, during the present year, will be compelled to manure their lands with the fish they have taken; if they were permitted to manufacture it themselves, all Europe might be supplied from these islands, with the fish they would be enabled to cure. But, as the law now stands, the natives are constantly in perplexity and distress. If salt is to be had, the regulations respecting it are so complicated, that none of them understand them; by which means they are continually involving themselves in law-suits and difficulties. Add to this, the great distance to which they are obliged to go, in order to procure the salt; the expense attending which, together with the trouble, and the danger of trusting their crazy boats to the uncertainty of the seas, discourages them from attempting to cure their fish, and checks the progress of industry. The nearest custom-house to the island of Rum is Tobermorey. When they arrive there, they are under the necessity of entering into a bond with regard to the salt they purchase, and make oath, under heavy penalties, that every grain of salt they take home, is to be altogether and entirely appropriated to the curing of fish. When the operation of curing the fish is completed, if a single gallon of the salt remains, they must make another voyage to the custom-house, with the salt and the fish they have cured; display both before the officers of the customs, and take up their bond. But if any part of the salt thus purchased is found afterward in their houses, they become immediately subject to penalties, sufficiently burdensome to ruin them entirely, or effectually to put a stop to their future industry. If the year prove unfavourable, and a scarcity of salt prevail, as is the case at present, they are not only deprived of the means of pursuing their fishing to advantage, but even deprived of sustenance for their families during the winter; although Providence has blessed their shores with every necessary, even to abundance, and the power of preserving the plenty thus bestowed is constantly within their view.

"Our repast being ended, I mentioned my intention of climbing to the heights of Oreval, the mountain which encircled us on all sides, to ascertain the productions and composition of the mountain itself, as well as to determine whether the

* Tour to Heb. p. 203.

other hills of Rum, which lay behind on the southeastern side of it, were distinguished by appearances equally remarkable. Mr. Maclean, and the two young Highlanders, sons of his brother's tenant before mentioned, accompanied me. It was towards evening, and the beautiful effect of the setting sun, in an atmosphere at that time perfectly clear, gave us an opportunity of seeing all the surrounding scenery to great advantage.

"We soon found ourselves in the centre of the crater of Oreval. That it had once been a volcano of very considerable importance was beyond a doubt. Whether its influence, in the era of its terrors, was characterized by creation or destruction, I leave to the determination of others. The bottom of the crater, like that of most extinct volcanoes, was occupied by a pool of water, surrounded by a morass. All the interior parts of the crater itself, that is to say, its sides diverging towards the pool, were destitute of any sort of vegetation, and consisted of loose, incoherent matter, which lay in strata one over the other, and occasionally, being detached by rain, had fallen towards the bottom.

"Near the bottom of this crater, Mr. Maclean showed me the remains of the snare used for taking the red deer, at a time when they were exceedingly numerous upon this island. About ten years ago, they became perfectly extinct in Rum. The natives themselves destroyed several of them; but the principal cause of their extirpation must be attributed to the eagles, who devoured not only the young, but the old ones themselves. One would think it incredible, that an eagle should venture to attack so large an animal as the stag of the great red deer. The mode in which the natives account for it is, that the eagles plunged upon the head of the intended prey, and fastened between his horns. This drove the stag to madness, and he would speedily rush headlong down a precipice; when the eagle disengaging himself during the fall, would return at leisure to mangle the carcass of the expiring victim.

"The mode in which these snares were constructed is this; a wall or rampart of stones was erected along the side of the mountain, flanking a considerable part of it near its basis; at either extremity of which a pit was formed, concealed by a circumference of the same stones which formed the rampart. In this pit the hunter stationed himself with his gun. A number of people were then employed to alarm the deer, who instantly taking to the mountain, and meeting with the wall, ran along the side of it till they came to the pit, in which

the sentinels were posted, who easily selected one of them as they passed, and levelled him with his musket.

"Mr. M remaining in the crater with his gun to seek for game among the heath and morass, I continued my journey towards the summit. In my way up, among the loose stones near the top, those beautiful birds the ptarmigans came so near me, and appeared so little alarmed at my intrusion, that I nearly took one of them with my hands. It appeared of a fine glossy dark colour, almost black, with a beautiful ring of the purest white round its neck. They change their colour with every season of the year; and are seen alternately brown, gray, and white. Its most usual appearance is that of a dusky brown, like moor fowls; as the autumn draws to a close, it becomes gray, and in the winter it is perfectly white. It never appears in the lower region, but almost always inhabits the tops of the high mountains, living in the cavities of loose stones or rocks, preferring always a situation the most solitary and desolate, and destitute of verdure.

"The boundless horizon opened before me as I approached the summit.* Looking over Sandy and Canna, to the north-west, I beheld a vast range of islands, extending upon the smooth expanse of the ocean, which at this moment appeared perfectly calm, and like a prodigious plate of glass, infinite in its dimensions. Upon this polished surface, I beheld, at once view, the whole islands of Canna, Sandy, Sky, with the more distant shores of Bernera, Mingalla, Pabba, Sandera, Waterra, Barra, Hellesay, Giga, Iriskay, South Uist, Benbecula, North Uist, and I believe Harris; but the high lands of Sky intercepting the prospect to the north, and entirely concealing the Lewis, might possibly interrupt the view of Harris land; although, from the information I afterward received, as well as from my own observations, I think the Sound of Harris, with the south part of Lewis, in the neighbourhood of Loch Lodwal, and Finnis Bay, is visible from the summit of Oreval. Turning towards the south, I next beheld the islands of Col and Tirey, the Point of Ardnamurchan, the isle of Mull, the Treshannish Isles with the Dutchman's Cap, Staffa, and Icolmkill, beyond which, the tract of ocean spread without an intervening object, till it seemed to melt in air, and mingle with the clouds.

"A remarkable appearance peculiar to prospects from such exalted eminences, was at this time singularly beautiful. Be-

* The height of Oreval is estimated by Macculloch at 1795 feet. A mountain on the eastern side of the island, called Ben More, is computed by him to be 500 feet higher.

yond Canna and the Sandy Isles, a bright range of clouds extended like a wall across the sea, over which appeared the westernmost range of the Hebrides; so that Barra, and the Uist islands, with Benbecula, appeared above the clouds. I remember once being with a party of English ladies upon Mount Vesuvius, when the Isle of Caprea was displayed in the same manner, and one of our party, who probably had never witnessed a spectacle of the same nature, and was not remarkable for the brightness of her observations upon more trivial occasions, was so struck with its singularity, that she exclaimed, 'Look! for God's sake, look! there's an island in heaven!'

"While I was thus employed upon the broad and bleak top of this mountain, which consists entirely of loose fragments of stone, destitute of any other verdure than a few patches of moss, I heard behind me a low, plaintive, and repeated whistle, which, upon looking round, I perceived to originate in a flight of plovers, which had settled close to me among the stones. They were so tame as to admit of my approaching almost near enough to put my hat over one of them, who taking the alarm, the whole body were again in motion, and flying down the mountain, were soon intercepted by Mr. Maclean, the report of whose gun I heard at intervals afterward, during the time I remained there. As soon as I descended from the heights, our guide conducted me to a remarkable spring, which gushed from a natural basin, near the foot of the mountain, throwing out a quantity of the clearest water, almost equally copious to that of Holywell, in North Wales. It soon found a passage to the sea, much augmented by various tributary streams, which it met with in its progress.

"This island has been hitherto little visited, and is therefore little known. Travellers who have been there, generally approach by Loch Seresort to Kinloch, by which means they lose an opportunity of seeing the most western side of the island, by far the most interesting, and offering a treasure to the notice of the naturalist, which I trust will in future be less neglected. In vain may travellers expect to derive any information respecting Hebridean curiosities from the natives. They ought to be well acquainted with the proper objects of inquiry before they visit any place. The inhabitants constantly accustomed to the sight of objects which are novelties to strangers, are as ignorant of any thing in them worth a traveller's attention, as they are of the real nature of the objects themselves. Hitherto these objects have been little known, and therefore could not be pointed out; but every day they are brought more and more to light, which gives me reason to

suppose the island of Rum will one day be considered, if not the most remarkable of the Hebrides, at least a very important field of inquiry.

"The Solan geese hovered round the boat at our return, raising themselves to a great height in the air, and then plunging into the sea. What is remarkable, we observed that they always rise out of the water with a spring, which shows that they form a curve in diving, as they dash in with great violence, causing the sea to rise in a foam as they enter, and then spring out again.

"The next morning I dedicated my attention entirely to Canna. Mr. M. introduced me to a Mr. Macneil, who resides there, and who conducted me during this and the following morning over the island. The basaltic pillars, of which the greatest part of Canna is composed, rise in ranges one above the other. I measured the height of the columns in the lower range, and found them to be twenty-two feet above the surface of the earth; but it is impossible to ascertain how deep they may extend below the surface. There were others in the groups above, still higher, but they were not so easy to be measured. These pillars exactly resemble those of Staffa and the Giant's Causeway. There is no other difference, than that their sides and angles have suffered more from exposure to the air, and are not so nicely determined; but the inter-sections of the pillars, and the form of them, are precisely the same. The Hysheer rock, about ten miles from this place, is composed of a group of basaltic pillars rising out of the sea, in which the angular appearance is more nicely determined. The pillars there are also smaller than those of Canna. The stones which compose the columns are mostly pentagons. I measured the diameter of the largest stone I could find, and it was three feet in every direction; in thickness thirteen inches.

"Mr. Macneil next conducted me to the castle on the side. We entered the old gateway. The original ascent to the interior part, after passing the gateway, was by natural steps of natural basaltic pillars, lying obliquely, over which the arched passage of the ancient porch was built. This castle was formerly used as a prison for the wife of Macdonald, of Clanranald, to secure her from the addresses of Macneil, an ancient laird of Barra. The lady, however, found means to effect her escape and join her lover; for one night, having sewed together her blankets, she let herself down and fled.

"The castle has been built on the summit of a small promontory, formed by a lofty range of basaltic columns. I went round to the north-western side of it, and beheld pillars inclining in all directions; some standing vertically, others

bending like the curved columns of Staffa : but with still greater variety. Some lay horizontally ; others again were placed with their sides parallel to the earth, but their two extremities raised.

“ The contemplation of these pillars, at once determined the absurdity of attributing the bending pillars of Staffa to the weight of the incumbent earth. We found at Canna the straightest columns, where there was the greatest pressure of superincumbent matter ; and curves of all forms and inclinations, in pillars that appeared to have supported no weight whatever. The most remarkable appearance of this kind is below the castle. The pillars here diverged in radii from a common centre, but instead of meeting at one point they surrounded an orb of horizontal pillars ; offering thus altogether a rude representation of the sun, with his beams of glory darting in every direction.

“ Crossing the sand at low water, from this castle to a small island near it, we were shown the trunk of a large tree, with some of its branches, lying thirty feet below the surface. It was discovered about six years ago by the accidental falling of a part of the cliff ; it is reduced to perfect charcoal, and burns freely when put to the fire. Canna, at this time, is destitute even of a gooseberry-bush. What revolutions must have taken place, since trees of such magnitude flourished there ! By removing some of the surrounding matter, I discovered the traces of another piece of timber farther in the cliff. Probably a forest may have been overwhelmed ; for if we may judge by the magnitude of the tree lying there, these islands were once in a very different state. I do not believe there is a piece of timber, half the size of what we saw buried, in all the Western Islands.

“ My next journey was to the Magnetic Mountain, or as the sailors call it Compass-hill. Our ascent to it was over a beautiful pasture of clover and fine grass, growing naturally on the island, and never requiring the aid of manure. I reached the summit of this mountain, with the compass from our vessel in my hand, walking slowly, in order to note the alteration. My approach was on the north side. As I came near the summit, I observed the needle beginning to veer towards the west. Immediately I placed the compass on the ground, and almost as rapidly it stood six points from the north, or west-north-west.* Within these few years, a rock, having the same

* This disturbance of the magnetic needle occurs in all basaltic countries. Dr. Macculloch, speaking of the Compass-hill, says,

“ This circumstance is equally remarkable in most of the basaltic countries which I

remarkable property of altering the direction of the compass, was discovered at the north-west side of the harbour of Canna. The discovery was made by some sailors passing round it in a boat, with a magnetic needle, which they intended to have taken up the hill. Stopping opposite this rock, by accident, one of them observed the needle pointing directly towards the south. We made an experiment with the same success. I tried several experiments with stones from the hill, and fragments of the rock in the harbour below, but never could find any of them that would effect the slightest change in the direction of the compass.

"The inhabitants of Canna, like those of the neighbouring islands, are chiefly occupied in the manufacture of kelp. Cattle and kelp constitute, in fact, the chief objects of commerce in the Hebrides. The first toast usually given on all festival occasions is—'a high price to kelp and cattle.' In this, every islander is interested, and it is always drunk with evident symptoms of sincerity. The discovery of manufacturing kelp has effected a great change among the people; whether for their advantage or not, is a question not yet decided. I was informed in Canna, that if kelp keeps its present price, Mr. Macdonald, of Clanranald, will make 6000*l.* sterling by his kelp, and Lord Macdonald no less a sum than 10,000*l.*

"But the neglect of tillage, which is universally experienced since this discovery was made, is already sensibly felt; and promises to overbalance the good which is derived from it. The lands lie neglected, and without manure: and if naked rocks are to succeed corn fields, and the labourers desert the pursuits of husbandry to gather sea-weed, the profits arising from kelp to individuals, will ill repay the loss occasioned to the community at large, by the defect of those necessities they are accustomed to derive from their lands.

"The best kelp is usually supposed to be that which is manufactured in the island of Barra. Mr. Macneil, the laird of that island, informed me he got last year twelve guineas a ton for his kelp. The rainy season has this year damaged vast quantities of that which he is preparing, notwithstanding which, as far as I could learn, he will be enabled to send 300 tons to the Liverpool markets. The great scarcity of barilla, arising from the war

have examined; nor is it here peculiar to the Compass-hill, since it also occurs in many other parts of the island. The influence is occasionally limited to a space of three or four feet, but is also sometimes extended to distances much more considerable, so as to produce a decided effect on the variation of the needle." Macculloch, v. i. p. 30. —E.

with Spain, has considerably augmented the speculations of all the Western islanders, with regard to their kelp, which is expected to bear a very high price.

"The manufacture of kelp is conducted by the following process :—

"The sea-weed is first collected and dried. The usual mode is to cut a portion of kelp annually from the rocks, taking it from the same place only once in three years. After the kelp has been dried, it is placed in a kiln prepared for the purpose, of stones loosely piled together, and burned. After it is consumed, and the fire is to be extinguished, a long pole pointed with iron is plunged into it, and it is stirred about ; the result of the burning being, by this time, a thick glutinous liquid, which runs from the kelp in burning. As soon as this liquid cools, it hardens, and the operation is at an end. It is then shipped off to market. The usual expense of manufacturing kelp, is about two guineas a ton for the labour ; if it is sold on the shore, which is generally the case, and estimating the kelp only at eight guineas a ton, the proprietor clears six.

"The harbour of Canna is the most beautiful in all the Hebrides. It is small, but safe and commodious ; and the scenery around it is not surpassed by any thing of the same nature in Europe, the bay of Naples only excepted.

"We sailed from Canna on the 27th of July, and at daylight next morning, found ourselves in a thick fog, so carried by the tide out of our course, that no man on board could discover where we were ; although we lay close to the land. Mr. Maclean, at last, discovered Ribbeter castle,* at the entrance of the sound of Barra, by which means we discovered ourselves to be close under the land of South Uist. We made directly for Barra, and entering the sound towards evening were landed at Kilbar, and conducted by Mr. Maclean to the Laird's house. Mr. Macneil, who by way of eminence, is distinguished over the Hebrides by the appellation of the Great Macneil of Barra, came out to meet us. I found him with his family, at this period of the year, burning large fires in all their rooms ; so perfectly unlike summer was the appearance of the climate. We were received with that hearty welcome and hospitality so peculiar to the Western Isles. Beds were prepared for our reception, and every attention shown that could possibly mark the native characteristic of our host. The family were just preparing to dine, and we sat down to as mag-

* "The Weaver's Castle. It is not known why it was so called. Some think from a weaver who had been imprisoned there."

ificent a repast, as could be furnished in the first British houses, with all the preparation and ceremonial arrangement necessary for expected guests.

"Trifling circumstances are sometimes striking indications of national varieties. I was a good deal struck with seeing raw carrots handed about in an elegant bowl of sallad, and a beautiful woman taking a very large one out with her delicate fingers, and gnawing it, as an article of luxury. Pears were also brought to eat with cheese; a mode of diet perhaps common to many, but it was perfectly new to me. When we retired from the table to join the ladies in the drawing-room, we found the younger branches of the family without shoes or stockings, and a tall boy, nine years of age, very smartly dressed, who did the honours of his mother's table bare-footed. Such is the mode in which the Scottish children are brought up, and inured to all the changes of heat and cold. They run about in the open air, as soon as they walk, with bare feet, in the wet, or upon cold pavements of stone, without any hats, or covering for their heads: and the consequence is they are all healthy, strong, and well shaped. How absurd is the custom in England of wrapping up a child, as if the slightest breath of air, would endanger its life. After all our care, we shall never produce such a number of handsome women as Scotland, nor sons so sturdy as the Western Islanders.

"In addressing Mr. Macneil, or any of the highland lairds, it is not polite to call him by his surname, or to add the appellation of Mr., but to call him by the name of the island or place at which he resides. I observed that every body in company with the Laird of Barra, even his servants who spoke to him, said simply Barra, without any other addition. A singular custom is related of Barra's ancestors. It was usual in remoter periods, when the family had dined, for a herald to sound a horn from the tower of the castle, and make the following proclamation, in the Gaelic language, 'Hear, O ye people! and listen, O ye nations! The great Macneil, of Barra, having finished his dinner, all the Princes of the Earth have liberty to dine!'

"The present Laird has travelled over various parts of Europe; is a man of very polished manners, easy in his address, affable in his behaviour, benevolent to his tenants, and popular among the neighbouring clans. Having spent the early part of his life at a distance from the residence of his ancestors; he has now married, and lives upon his paternal estate, devoting his time to the cultivation of his lands, the improvement of his estate, and the care of his family and his tenants. The morn-

ing after our arrival, he conducted me to different parts of the island."

"I was sleeping in the house of the Laird of Barra, on the morning of the 30th of July, when Mr Maclean entered my room hastily, and waked me, with the pleasing intelligence that Mr. Ritchy was on shore, and begged we would go on board without delay, as the wind was favourable for St. Kilda, and the weather extremely fine. Our long-concerted project was now likely to take place, after innumerable difficulties, some real and others imaginary, which had been artfully opposed to interrupt it. Not one of our crew ever saw St. Kilda, or had ever been near it.

"We lost no time in getting on board. The Laird of Barra, with two of his men, undertook to pilot us out of the sound, and he shortly after left us safe in the Atlantic ocean. We had not been above an hour at sea, before land was made from the topmast head, which proved to be the islands of St. Kilda and Borerà, bearing due north from the sound of Barra. St. Kilda is erroneously laid down in Mackenzie's charts. He states it to be north-north-west, and as we steered accordingly, we should have been carried much out of our course, if the weather had not proved remarkably clear. It is always deemed a forerunner of bad weather in Wales, when the eye is able to command very distant objects at sea; and so it proved, for soon after a thick fog surrounded us, attended by squalls and a very heavy rolling sea. Our bowsprit frequently struck with great violence into the waves, and we were apprehensive the main-mast would go by the board, as we had a very heavy boom, and our tackling was a little the worse for wear.

"About one o'clock, the men in the forecastle descried the land of St. Kilda, through the mist, and our mate laid the vessel to. Morning came, without offering any hope of a favourable change. Nothing could equal our anxiety, to see the immense rocks of the island, rising above our topmast, within a quarter of a mile, and not to be able to land. So great was my eagerness to see the island, that I petitioned in vain for the boat, to make an endeavour to land, but the surf was alleged as offering an impassable barrier. I could willingly have cast myself into the sea, and swam on shore, if I thought the most distant hope remained of securing a landing after the experiment.

"The magnificence of the stupendous cliffs about the island astonished every one. Mountains of rocks lay one within the other, as if defending each other with a vast artificial wall. Sometimes they shot up perpendicular to a prodigious height;

at others they lay in various fantastic forms, piled against each other.

"After some time, the mist gradually dispersed round the lower part of the cliffs, and we observed something like a sound, leading through a narrow chasm in the cliff to that part of the island where we supposed the bay of St. Kilda to be situated. Upon this, I petitioned Mr. Ritchy to order out the long boat, as we might at least venture to explore the sound. He accompanied us with six stout rowers, and we entered the sound between two stupendous mountains, which appeared to have cracked asunder, and in whose sides wide caves opened their craggy mouths: while all within was dark and horrible, and no sound heard but the breaking of the sea, or the screaming of the sea fowl, who had there deposited their young.

"Here Mr. Ritchy shot a fulmar, the first we had seen, which fell into the sea, and created a partial calm all around him, by the quantity of oil he ejected from his mouth. We now made an attempt to land, but in vain, upon a part of the cliff that sloped more gradually from the heights above, and from which I thought it might be possible to effect a passage to their summits, and from thence to the interior part of the island. Our veteran mate appeared here to be seized with a fit of determined resolution that surprised us all; for, looking forward, and perceiving that the surf of the bay broke over the rocks into the sound, he called out 'hurra!' to the men, and bade them pull stoutly towards it. I was stationed in the prow, and desired to keep a look out for the rocks, which occasionally disclosed their angry visages among the breakers. The scene was formidable. The waters appeared to have no regular bed whatever, sometimes boiling on one side, they left the other bare with naked rock; at other times rising in front, as if determined to overwhelm us, they formed a rampart of foam, which, descending with a noise like the loudest thunder, lifted us suddenly to a height that made the boldest tremble. The rocks seemed now to shut us in entirely; our boat was tossed like a feather among them; I could see no passage whatever to the bay, but the men, giving repeated shouts to animate each other, with a violent struggle at last surmounted them all.

"We now entered the bay of St. Kilda, formed by a small projection of its northern extremity, and a lofty insulated wall of enormous rocks, separated only from the island by the sound through which we passed. The reader will perhaps imagine what my emotions were, as I approached the shore, and beheld the little colony of St. Kilda, situated about a

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The sides of the high mountains, slope gradually towards their centre, and shelter it from all winds, which at that time blew violently into the bay, and rendered it impossible for any vessel to remain there.

As our approach to land was now generally felt. As our approach to the shore, we perceived the natives in great confusion, some running towards the hills, others on the tops of their huts, pointing with great earnestness towards the boat. We had stolen unperceived upon them from the sound as the mist had concealed the approach of the cutter, and she then lay behind the island. If she had sailed into the bay, not a man of them would have remained; for so great is their dread of strangers, that they betake themselves upon these occasions to the hills. We saw their two boats drawn up on the shore; and attempted to land at the same place, but were prevented by the surf. At this moment, I rose in the boat and waved my cap to invite them down; several of our crew did the same, and instantly they were all again in motion, running in a body to the shore. We asked by signs where to land, and they beckoned to a different part of the bay, where, running our boat upon the rock, and casting out a rope, it was instantly hauled out of the water.

"I shook hands with all of them, and began to distribute my little parcels of tobacco and snuff, when we were agreeably surprised to hear one of them, a good-looking young man, address me in broken English. He was pale, almost breathless with apprehension, asking repeatedly, 'Whence come ye?—what brought ye to our island?' I explained that we were English and Scotch gentlemen, all friends to the St. Kildians, coming without any hostile intention merely to see their island. 'Oh, God bless you!' said the young man, 'come! come along!—will you eat!—will you drink?—you shall have what you will of our island.' Some of them, more advanced in years, desired our young friend, in Gaelic, to ask how we knew the name of the island to be St. Kilda. I replied that books gave us this information. 'Books!' said the young man, 'what books? we have no books; is our island told in books?' I replied that Martin and Macaulay had described it. 'Oh, Macaulay! we know him very well—he came to see us.'

"As we proceeded towards the huts, I inquired how he learned English. 'Our minister taught me.' Have you then a minister? 'Oh, yes! Macleod is our minister; here he comes.' They all eagerly inquired, if it was peace or war. The minister, who was only distinguished from the other natives by

wearing a hat, instead of a bonnet, or cap of wool, seemed full as much alarmed as the rest, and hastily inquired who we were, and whence from? Being informed, he told us a general panic had seized the people, who took us at first for French or Spaniards. And what induced them to expect either of those nations at St. Kilda? said I. 'Oh, it is a whim the steward puts into their heads, sir,' said he, 'to prevent them from going to the Long Island, as they might then enlist for soldiers, and he would lose his tenants; but he need not fear this, for they are too much attached to the island to leave it. But I was myself,' continued he, 'a little alarmed, thinking you might probably belong to some privateer.'

"Matters were now becoming a little more composed. The women gathered round us, with evident looks of distrust and terror. Mr. Macleod conducted me, at my request, into several of their huts, but they reproved him loudly in Gaelic, saying, as he informed me—'You are showing them where we sleep, that they may know where to find us in the night time: when they will come and kill us all!' At this moment, one of our party indiscreetly fired a gun at one of the Solan geese, which hovered over their huts: instantly a universal scream broke forth from all the women; the men all surrounded their minister; and a general alarm once more prevailed, which was not easily dispelled. Not one of them would permit me to enter a hut afterward, till all the rest were gone off to the cutter.

"We all adjourned to the hut of the minister, which differed from the rest only in having two chairs, and a couple of bedsteads, and a bare earth floor, instead of a covering of peat ashes and heath. His wife and mother were introduced to us, who with himself and three small children, resided in that wretched abode. It is true he might be called king of the island in the absence of the taxman, but his throne is the throne of wretchedness, and misery his court. His father preceded him in the office of minister to St. Kilda, which he held during sixteen years. The present minister has been with them ten, and it is from his instructions that two or three of the inhabitants have derived a slight knowledge of English.

"We now settled our plans for the day. It was determined that I should remain on the island, and that the rest of the party would wait with the cutter as long as the weather would possibly admit. They all went off in the boat, and the natives gathered round me in a crowd, seeming highly delighted, that I remained among them alone, and with no other object than curiosity. I was now admitted freely into all their huts, and having distributed the remainder of my stock of tobacco. re-

ceived a general welcome from them all, and an assurance that they would go with me where I pleased, and that I might take any thing I could carry from the island.

"The construction of their dwelling-houses differs from that of all the Western Islands. They consist of a pile of stones without cement, raised about three or four feet from the ground, forming a small oblong enclosure, over which is raised a covering of straw, bound together with transverse ropes of bent. It is difficult at first entering these huts, which will not admit a man without stooping, to discover any object within them, from the great quantity of smoke with which they are constantly filled. The natives are not anxious to be free from it, as it adds to the warmth of the hut, and long custom has rendered so unpleasant an atmosphere habitual, if not requisite. They have no hole in the roof by which it may escape; but as it is impossible to bear the collected fumes of their peat fires, without getting rid of some of it, they make two small holes in the sides of their huts, opposite to each other, about seven inches in diameter, one of which is open and the other closed, as the wind happens to blow. The fire is of peat, and placed in the middle, over which is suspended the vessel, in which they make their fulmar broth, the prevailing and almost only diet they have, except the carcasses and eggs of Solan geese, and a few other birds, with sometimes fish; but the fulmar seemed the principal food when we were there. This will appear remarkable, when it is known that they have plenty of sheep and cows, and grain enough for them all upon the island, not a portion of which they are permitted to use. The ashes of their peat fires are carefully spread over the floor of their huts, mixed with a little water, and covered with heath, all which is trodden together and preserved for manure; not, as has been supposed, to cultivate lands for their own use; but to feed the rapacious avarice of distant taxmen, who have nothing more to do with their island, than to visit it once or twice a year to plunder the inhabitants of every thing they possess.

"Round the walls of their huts, are one or more small arched apertures, according to the number of the family, leading to a vault like an oven, arched with stone, and defended strongly from the inclemency of the weather; in this they sleep. I crawled on all fours, with a lamp, into one of these, and found the bottom covered with heath; in this, I was informed, four persons slept. There is not sufficient space in them for a tall man to sit upright, though the dimensions of these vaulted dormitories varied in every hut, according to the number it was required to contain, or the industry of the own-

ters. From the roof of their huts were suspended the various implements of husbandry, or bird-catching, the ropes by which they descend the precipices, their rods, and hair springs for taking Ailsa cocks, &c. Among other things, they showed me large bunches of long bladders, containing a very precious oil, which they take from the fulmar, and preserve in the gorge or stomach of the Solan geese. It serves them to supply their lamps; and as a medicine, is inestimable; for, according to their account of it, and even from Mr. Macleod's information, it is a sovereign remedy for the rheumatism, sprains, swellings, and various other evils. Mr. M. told me, it was very efficacious as an anti-rheumatic, but the strong smell of it frequently prevented him from using it. All the natives smell of this oil, and the effluvia affects a stranger's olfactory nerves so sensibly upon entering their little town, that being ignorant of the real cause, he supposes it to originate in the inordinate filth of the inhabitants.

"Every native of St. Kilda possesses, at least, one dog; some of them have three or four, who follow them to the cliffs, and are useful in taking their birds. They are chiefly of the breed called the Highland terrier, a small rough hardy race, with long backs, very short legs, black hair mixed with gray, tan-coloured visages, and erect ears. They destroy otters, and creep into the burrows of the Ailsa cocks, who live in holes under ground like rabbits. There were also several of the Pomeranian kind, with thick curling tails, and very like the sheep dogs used in the mountains of Savoy.

"I saw none of the causeways mentioned as forming what they term a street, between their huts. The huts are built without the least attention to regularity, not fronting each other, but standing in all directions. The passages between them were almost knee-deep in mud when we were there, into which a few large unshapen stones, at various distances from each other, and of different sizes, had been carelessly thrown, to keep their feet out of the mire. But this was not always possible; and I am not certain whether it was a work of art, or the casual fall of the stones from the hills above. Sometimes round a particular hut, a narrow rampart was raised above the mud, which probably may have given rise to the description before alluded to.

"The people of St. Kilda make two meals a day. One at twelve o'clock which forms their dinner, and a sort of supper at nine. They never eat breakfast. At their first and principal meal, a single fulmar made into broth, with a species of sea-weed they call sloke (the same name is given to the same weed in the other islands, and I believe it is what we meet with

at English tables under the appellation of laver,) is the whole of their food for a whole family, consisting upon an average of five or six persons. I could not learn why this scarcity should prevail, as they might have birds whenever they pleased to take them; but I believe it is a rule in the community, that the overplus may be saved for their winter provision. On the hills above their houses, reaching to the very summits, and along the edges of the precipices, are several round buildings of loose stones, arched over, and about four or five feet high, in which they dry their peat. The constant mists which prevail upon the island, would prevent them from being able to dry their peat if it were not for these covered reservoirs. But another principal use to which they are appropriated, is the preservation of the eggs and carcasses of Solan geese against the winter, which are here deposited in peat ashes. But they are not so anxious as they formerly were to take the eggs of these birds, as the taxman exacts a great part of their rent in feathers, which makes it necessary for them to secure as many of the geese themselves as they can.

"The inhabitants of St. Kilda consist of about one hundred persons, men, women, and children. They are divided into twenty-two families, each family upon an average consisting of five or six persons. The St. Kildians are not filthy in their persons, as has been often imagined; if it was not for the smell of the fulmar oil, which they always carry about them, there would be nothing disagreeable in them. They are generally better clothed than the lower orders of people in the north of Scotland, that is to say, they do not go in rags. Several of them wore shoes, which surprised us, and a kind of long plaid pantaloons, which descended over their feet; this is their most ancient dress. John, the giant of Col, held up his pantaloons, when dying, and asked the priest, if a man who filled them need fear the devil? Their cloth is of their own manufacture, and generally striped woollen. They wear bonnets or caps; the bonnets resemble the rest of those worn in Scotland; the caps are of their own making, dyed black of sheep skin, edged with black wool. These latter are very handsome, and fall as good as any of those made in London of the same form for the army.

"They are remarkable for the beauty of their teeth. I did not see a single instance of a St. Kildian with bad teeth, and many of them had the most pearly whiteness, as even as possible. Their faces are somewhat pale, owing to continual residence in smoke, but their skins are fair and pure, and free from cutaneous eruption. I attribute this to their not eating any salted provisions. They salt neither bird nor fish, nor even

use it in their meals. They are generally short and stout made; I saw no tall persons on the island.

"They use the quern, as in the rest of the Hebrides, to grind oatmeal for their tax, and to manufacture snuff from the leaves of tobacco. Into their snuff they infuse a little aniseed, which gives it a very pleasant flavour. Their snuff-boxes or snuff-mills,* as they are called in Scotland, are formed simply of a cow's horn, stopped at the large end, and a small piece cut off to let out the snuff, at the point, in which they fix a piece of leather.

"It will be readily supposed that I neglected no inquiry respecting the remarkable circumstances which are related both by Martin and Macaulay, and reported all over the Western Islands, with regard to a cough the natives catch whenever strangers arrive upon their island. During the whole time I remained among them, I endeavoured by every possible means to ascertain the truth or falsehood of this extraordinary tale. The minister, Mr. Macleod, in answer to the first question I put to him, assured me, in the most solemn manner, that the circumstance was true. Both Mr. Maclean and myself examined and cross-examined, both his testimony and that of the natives themselves; and the result of our inquiry was, that a cold or cough, was annually communicated to all the inhabitants of St. Kilda; not from any vessel that might chance to arrive, but from the taxman's boat alone, whose casual advent was not fixed for any stated period, but was a month sooner or a month later, according as the weather proved favourable or unpropitious. A vessel from Norway visited St. Kilda this year, before the arrival of the taxman, the crew of which mingled with the natives, but no cold or cough was communicated to them. The fact appeared now more marvellous than ever. That an effect so remarkable should be peculiar to the arrival of one particular boat, is hardly to be credited. Nevertheless, the fact is indisputable. The taxman comes, and all the island catch a cough; other vessels arrive, both before and after, and no such effect is produced. He had been gone only eight days when we arrived, and I saw several both young and old afflicted with this malady to such a degree that it had nearly proved fatal to some of them. I was at first perfectly confounded with the evidence of

* "From the use of this appellation, I suspected a clue was offered to discover an ancient custom in taking snuff, like the Alpine Shepherds. The inquiry was successful; several old inhabitants, in different parts of Scotland, assured me they recollected machines in general use, which, like a nutmeg grater, made the snuff as often as a pinch was required, and which were the only snuff-boxes used. This custom now prevails in the Alps. Hence the appellation snuff-mills applied to snuff-boxes."

my own senses. I felt that in relating it at my return, the tale would either become established as a fact, no longer to be doubted, or subject me to an imputation of the weakest credulity. I prosecuted my inquiry to greater extent, and with renewed vigilance ; at length the light began to break forth, and the mystery was disclosed. I hope I shall be able to explain the real nature of this cough, by relating the true cause of its origin.

"The young man whom I mentioned at my arrival upon the island, and whose attentions never left me during the time I remained there, had been married but a few days. They postpone their marriages till the arrival of the steward, and he expressed a wish that I had been present upon the occasion. 'Then,' said he, 'you would have seen the whole island dancing, and the whole island drunk.' And what do you find to get drunk with here ? 'Whiskey ! the steward always brings whiskey, and, when he comes, we dance and sing merrily.' And don't you dance during the rest of the year ? 'Not so much ; when the steward comes, we dance all night, and make a fine noise altogether.'

"I applied to Mr. Macleod for farther information upon this subject, and was told that this was the reason of their postponing their marriages. The arrival of the taxman, or as they call him, steward, is the jubilee of the year. He brings with him spirituous liquors, and a total change of diet. The return of this period is the only gleam of sunshine which cheers the long and gloomy night of their miseries. They hail his coming, they rejoice, they drink, they dance, their spirits are elevated, they become heated, they expose themselves to the humid influence of an atmosphere, constantly impregnated with fogs ; their mode of diet is totally changed, and the consequence is very natural, that out of twenty-two families, the greatest part of them are afflicted with a violent cold and cough.

"I expressed my sentiments on this subject to their minister, but nothing could alter his opinion. He admitted the truth of what I have stated with regard to the arrival of the taxman ; but remained bigotted to the old miraculous tale of the cough being taken from the smell of fresh air, which hangs upon the taxman's clothes. Allowing for a moment the truth of so absurd a supposition, the taxman, in that case, would not be the only person to communicate a smell of air, foreign to the olfactory nerves of the St. Kildians. The Norway vessel, which arrived before him, or our cutter which came after, would produce the same effect. I have no doubt whatever, in my own mind, respecting the real origin of the St. Kilda cough. Whether my readers will coincide in my opinion I know not ; but, until I hear the circumstance otherwise rationally ac-

counted for, I must attribute it to the alteration in manners and in diet, the intemperance and riot, which take place upon the arrival of the taxman. It is true, many of the children in the island were afflicted with the same malady; from which I conclude, that the mothers who imprudently, or rather ignorantly, exposed themselves to the night air, heated by whiskey and dancing, exposed their children also.

"In addition to the cause I have alleged for the St. Kilda cough, it is necessary also to mention the great heat of their little huts, filled with smoke and the fumes of peat; and when a number crowd into one of these to conduct a bride and bridegroom to their cell, they can have no occasion for the influence of whiskey, to increase the violent perspiration they are subject to, in consequence of confined air and dancing.

"Upon this subject, I have only therefore to add, that of the cough itself, upon the taxman's arrival, there is no doubt whatever. Whether the same may be said of the cause of it, must be left to the decision of my readers. In every part of Scotland where I have related this circumstance, attending the arrival of the taxman, they had no doubt but the cause to which I have ascribed the St. Kilda cough was the real and sole one. But it had always been understood before, that any strangers whatever who arrived there, gave a cough to the island. In the islands of Lewis, the land of Harris, North Uist, Benbecula, South Uist, and Barra, it was understood that the first boat alone which arrived gave it. I have proved that neither of these was the case, both from the assertion of the natives, the arrival of the ship from Norway before the taxman, and ours subsequent to it. And now, having sufficiently discussed the marvellous St. Kilda cough, we will proceed to other matters.

"The superstitions of St. Kilda are numerous. It is futile to enumerate all the silly chimeras with which credulity has filled the imaginations of a people so little enlightened. The second sight, however, as forming a conspicuous and peculiar feature in the character of the western islanders, ought not to pass unnoticed.

"The faculty of foretelling future events, by supposed typical presentations, which involuntarily present themselves to the eye, is still pretended and believed in that remote island. Even the minister himself was not without credulity in this respect. He introduced me to two men who were particularly visited by these appearances. One of them, an old man of sixty, imagined occasionally he saw one of his companions stalking before him in his winding sheet, which vision was infallibly the forerunner of the death of the person so represented. The

other, a young man aged thirty-six years, had more variety in his visions. The minister assured me, with great solemnity, that he had foretold the coming of the taxman twenty days before his arrival; by relating that he had seen his boat under weigh, with such and such things on board.

"Both these circumstances are easily accounted for. Among a people destitute of any medical aid, there are certain diseases, which, for want of any other remedy than charms and incantations, inevitably end in death. When a native is seized with one of these fatal visitations, the event becomes probable, the expectation of it is natural, and the prediction of it not liable to error. If, however, a prophet fails in his anticipation, it is only to ascribe the fallacy to the immediate interference of some benignant and superintending genius, who, in the shape of a sprite, a fairy, or a pebble of some unusual form, effects a violation of nature's accustomed order. In the last instance, where the arrival of the taxman's boat is always fixed for a particular period of the year, subject only to alteration in consequence of unfavourable weather, it would require no very penetrating mind to discover, by the appearance of the season, when the advent will be, with an error less remarkable than that of twenty days from the moment of prediction.

"I endeavoured to argue this point with Mr. Macleod. But it is not easy, neither is the task attended with any pleasing consequences, to root out old prejudices by new systems of faith, especially when the advocate on the side of reason has numbered fewer years over his head than the advocate for superstition. Their humble and unassuming pastor modestly declined the contest; placidly reminding me that former ages possessed a faculty of this kind, which no young theorist had found presumption to dispute: and ended with an assurance that in the isle of Pabba, instances of this kind had occurred, and frequently transpired even during the present day, which had neither been accounted for nor denied. I must, however, do the minister of St. Kilda the justice to acknowledge, that to general superstition he was a declared enemy, and had neglected no means in his power which might conduce to the happiness or improvement of his people. With regard to this particular instance, his belief of second sight was not so much founded on any instance attached to St. Kilda, as on some marvellous tales he had heard, perhaps from men to whom he had looked up for instruction, respecting the island of Pabba, with whose inhabitants he had no intercourse, and whose prophet he knew only by report.

"The young man who was supposed to have predicted the arrival of the steward, was often in my company; and gene-

rally attended by the rest of the islanders, whom curiosity or kindness induced to follow me. There was nothing remarkable in his appearance, excepting that his countenance was paler than the visages of his associates, and his answers, as they were interpreted to me by the minister, were always intelligent and rational. I requested him to let me know his sentiments respecting my future life. He replied, that they could only be expressed in wishes for my happiness, which he had no doubt would ever be the consequence of kindness to poor people like those of his island. Of such a nature were many replies I received from the natives of St. Kilda, which, if not adulterated by refinement in the medium through which they were conveyed, bespoke a people far more intelligent than I had any reason to expect.

"My inquiries after the traces of antiquity in Borera and St. Kilda were not productive of any information or remark worth notice. The house of the druids, mentioned by Martin and Macaulay, at Borera, Mr. M. assured me had furnished them both with a source of erroneous conjecture. He described it merely as a Roman Catholic chapel, used to say mass in at no very remote period. An edifice of the same nature, but of very different construction, stood upon the heights to the south* of the village, to which he offered to conduct me, and we set out, followed by all the male inhabitants of the island, whom age or sickness did not confine within their huts. As we proceeded up the hill through the little cultivated patches of oats, barley, and potatoes, I was both annoyed and surprised by the swarm of dogs, which, like a pack of hounds, followed them in a body. They were not confined to any particular breed, but consisted of curs of all descriptions and of no description. The only determinate races were the Pomeranian, or fox-dog, and the old Highland terrier, which is now become scarce in the country. They are a hardy race, and differ from the English terrier in being smaller, with short legs, and long backs, and upright ears. They are particularly famous for killing otters, or any kind of vermin; and at St. Kilda, will creep over the high precipices, jumping from one protuberance of the rock to the other, bringing to their masters, the young of the Solan geese, fulmars, or any bird they happen to meet with. I brought one of them away with me, who was for some time as wild as a young fox, when turned loose upon any other shore, and very difficult to bring into subjection, running into holes to hide himself, and terrified with every thing he saw.

*Vide Martin

"The remains of St. Brianan's chapel consist of a circular pile of stones, very little larger than one of their common huts. Among these they pointed out a broad stone, on which the saint used to read mass to their ancestors. But of the saint himself, or the era in which the chapel was founded, they had no tradition extant. From St. Brianan's chapel, I continued my walk to the top of the hill, which formed one side of the sort of crater I noticed on my arrival. Continuing our walk along the island, we at last descended among the cliffs, to the mouth of the sound, by which we had effected an entrance to the bay. The beautiful puffins were sitting in prodigious numbers among the cliffs. Solan geese and fulmars were hovering above, and a variety of other aquatic fowls were riding upon the surf in the sound below. It was in descending one of these cliffs, I had the first opportunity of witnessing the agility of the St. Kildians; for when I had shot an Ailsa cock, which had fallen over the precipice, one of them with an astonishing intrepidity approached the brink of it, and letting himself down from one point to another, took the wounded bird from one of the frightful points on which it had fallen, and speedily returned with it in his hand.

"They were as much startled with the report of the gun, as they were surprised at the effect of it, though it was an object by no means new to them. But what of all others seemed most unaccountable, was the killing a bird as it was flying. At the sight of this, they began to caper and dance, talking with great earnestness to one another, and making signs as if they were shooting themselves, looking all the while as wild as a party of Indians. I more than ever regretted that I had not brought a few fireworks; the sight of which I am convinced would have been considered at St. Kilda as the effect of magic. The materials for launching a small balloon, or Montgolfier, were in the cutter, but the weather was so unfavourable, and my time so much taken up with seeing the island, that I gave up the plan I had long concerted of sending one from it. The minister communicated my former intention to them, and they expressed a vast desire to see the balloon; saying at the same time, what a fine contrivance it would be to take their birds from the rocks.

"We now seated ourselves upon a point of the rock above the sound, when we observed the vessel lying off, about half a league at sea, and the long boat coming on shore with some things I had ordered for the inhabitants, and for my night's lodging. It brought me a message, begging that I would come on board, as a thick fog was coming on, and the vessel, exposed to the heavy roll of a dead calm, would be drifted by the tide

upon the rocks, unless she were towed more out to sea, and that it was their wish to get away as fast as possible. On every account, I was anxious not to leave the island at that time ; so it was agreed if her situation became really dangerous, a gun should be fired, and I would repair with expedition to the point.

" Nothing could equal the joy of the poor natives, in finding that I was determined to remain with them. They crowded round me, all trying who could show the greatest attention, and would fain have carried me, in spite of my remonstrances, in their arms to the village, if the minister had not interfered. We returned to the town, and it was a melancholy spectacle to behold plenty of cows and sheep upon the hills as we passed along, not one of which the natives are suffered to enjoy ; although their island affords them pasture, and they are burdened with the care of them. The cows appeared larger than those I had generally observed on the Long Island ; but the sheep were remarkably small, of a black colour, wild and active.

" As soon as we reached the town, preparations were made for ascending the hills on the other side, in order to see a party of the islanders descend the precipices, for the fulmars and other birds. Five of these twisted round their bodies diagonally, from the left shoulder to the right hip, the ropes made use of upon these occasions. They are of two kinds, made of hides, or the hair of cow's tails, all of the same thickness. The first are the most ancient, and still continue in the greatest esteem, as being much stronger. The hair rope is a later invention, and more liable to injury from the rocks. The rope which is made of hides owes its origin to the invention of the natives. It is formed of various lengths, from sixteen to twenty, and thirty fathoms. That which I brought from the island measures three inches in circumference, which is the size of a common man's thumb. These ropes are made of cow's and sheep's hides mixed together. The hide of the sheep, after being cut in narrow slips, is plated over with a broader slip of cow's hide ; thus, the cow's hide covers that of the sheep. Two of these are afterward twisted together ; so that the rope when untwisted is found to consist of two parts, and each of these contains a length of sheep skin, covered with cow's hide. For the best they had on the island, they asked thirteen pence a fathom, which is the price they sell at among each other. It is easy to discover a new from an old rope, as the new ones still retain a little of the hair, like a man's beard before shaving. In the old ropes the hair is quite worn off. One of these ropes forms the portion of a St. Kilda heiress,

when she marries; and this custom still prevails, though they seemed to appreciate them at so low a price. The fact is, that although money is now current in the island, they know very little of the value of it; and have no other use for it than to buy tobacco and luxuries of the taxman: for which he takes care to ask them a sufficient price. Whereas the hide rope is always current coin, can be found no where but among themselves; life itself depending on the possession of it.

"Equipped with these ropes, a strong party of the natives, and their dogs, we began to ascend the hills. In our way, we passed several copious springs, that gushed out of the side of the mountain, pouring a great quantity of pure water down towards the town. At length we reached the brink of such a tremendous precipice, that accustomed as I have been to regard such sights with indifference, I dared not venture to the edge of it alone. Two of the people held my arms, and I looked over into what might be termed a world of rolling mists, and contending clouds. As these occasionally broke and dispersed, the ocean was disclosed below, but at so great a depth that even the roaring of its surf, dashing with fury against the rocks, and rushing with a noise like thunder into the caverns it had formed, was unheard at this stupendous height. The brink of the precipice was wet and slippery, the rocks perpendicular from their summit to their base; but what was my astonishment to see these intrepid aeronauts, as they might truly be called, approach, and sit upon the extremest verge, the youngest of them creeping down a little way from the top, after eggs and Ailsa rocks, which they took in great numbers by means of a slender pole like a fishing-rod, at the end of which was affixed a noose of cow hair, stiffened at one end with a feather of a Solan goose.

"My attention was now entirely engrossed by the adventurers, who were preparing for their daring flight. The young man whom I have so often noticed, was the first to launch from the precipice. Several ropes of hide and hair were first tied together to increase the depth of his descent. One extremity of these ropes, so connected, was a rope of hide, and the end of it was fastened like a girdle round his waist. The other extremity was then let down the precipice to a considerable depth by himself, as he stood at the edge of it. When giving the middle of the rope to a single man who stood near him, he began to descend, always holding by one part of the rope as he let himself down by the other, and supported from falling only by the man above; who had no part of the rope fastened to him, but held it merely in his hands, and sometimes supported him by one hand alone, looking at the same time

over the precipice, without any stay for his feet, and conversing with the young man as he descended.* In a very short time he returned with a young fulmar in his hand. The bird was placed on the ground, and a small terrier being set loose at it, provoked the bird to cast out repeatedly quantities of pure oil, which it spit in the dog's face, every time he approached. I held the palm of my hand below the bird's bill, and it was soon filled with a warm clear oil, having a very strong smell. When the fulmar had exhausted his stock of oil, he threw off from his stomach a quantity of thick orange coloured matter, like the sediment one sees at the bottom of a jar of oil. And this they always cast up, when the dog continues to provoke them after their oil is gone, as if from an effort to throw out more oil. The young man then again descended, and was let down to the depth of sixty fathoms. Here he seized four fulmars, and with two in each hand, continued nevertheless to hold the rope as he ascended, striking his foot against the rock to throw himself out from the face of the precipice, and returning with a bound, flew out again, capering and shouting, and playing more tricks than I had courage to see, for I expected his love of fame in displaying these gambols to a stranger, would either be the means of pulling the man over who held him up, or dash his own brains out with the violence with which he returned from these springs, if the rope did not slip through his comrade's hands, and send him headlong to eternity.

"Four fulmars were now placed before the dogs, several of whom attacked them, and were absolutely covered with the oil they threw out. The little terrier I brought from the island was one of them, and he retained the smell of this oil, for many days after we left St. Kilda.

"Several others now descended, and hung at different depths over the precipice, bringing with them whatever birds they met with, fulmars, Solan geese, Ailsa cocks, strannies, murrils, &c. The Solan geese are not numerous upon St. Kilda. The little island of Borera, at about five miles distance, is covered with them, and upon a rock near Borera, their numbers exceed all calculation. The best time for taking the Solan geese is in dark stormy nights. The St. Kildians then go with their ropes, and take prodigious numbers. The Solan geese have always a sentinel placed to keep watch ; the

* "I know not how to give my readers a better idea of this mode of descent, than by comparing the hands of the man above to a simple pulley, over which the rope is thrown, so that both the power and the weight are at the same point below ; for the person who descends, rises or falls at pleasure, by placing his feet against the rock, and either pulling the rope which hangs parallel to that which sustains him, or letting it slip through his hands."

object is to surprise this sentinel ; if he gives the alarm, all the rest immediately catch it, and the project for that night is overthrown.

"The mode by which the sentinel is surprised is this: they descend the rock at some distance from him, and then the pendant thief passes along horizontally till he comes close to him, when his neck is quickly broken, and all the birds remain perfectly quiet. He then goes to another, and placing his hand gently beneath his breast, softly lifts him up, till he places his feet in his hand. Thus situated, he conveys him to the resting place of another bird, and places him roughly beside him. A battle between the two instantly ensues, which disturbs all the geese on the rock, who come in swarms to the place to separate the combatants. The catcher then begins to twist the necks of as many as he chooses, thrusting their heads into his belt, or throwing them down if the place will admit of it, and by this means eight hundred are sometimes taken in one night.

"We were preparing to descend again to the village, when the fatal gun from the vessel, roaring round all the precipices, and heard for some time like distant thunder, summoned me on board. The men were much alarmed, and in a short time a number of the women from the village were heard squalling up the hill, leaving their huts from the fright it occasioned. I had some difficulty to pacify them ; and, upon my arrival below, found Mr. Maclean with the long boat, insisting upon the necessity of my leaving the island. I hesitated for some moments, well knowing it would be the last time I should see St. Kilda. At length I wrote a note to the mate, informing him of my determination to remain there during the night ; but if he found himself unable to cruise off the island, I begged he would make for the Long Island, and I would take the opportunity of the first west wind, to follow in the boat of the island. Another gun from the cutter increased the consternation of the natives, and cut short all hesitation on either side. I attended Mr. M. to the shore, and saw him depart, uncertain when our next meeting might be.

"As I returned from the boat towards the town, I observed that not one of the natives had accompanied us down, and was considering what might be the event of the mistrust they evidently betrayed, when I discovered my young friend with a party of his countrymen, running hastily towards me. As soon as they arrived, and my determination of staying was made known, they kissed my hands, running sometimes before, and sometimes after me, saying, 'Come, we dance and sing ; you eat and drink !—come ! make haste ! fine lad ! very dear !'

"We now all adjourned to the little hut of the minister.

The whole village was convened, and having stowed them as well as we could, the women on the floor round the wall, and the men standing behind, and those who could not get in, placed on the outside ; some of the oldest and most respectable of the inhabitants, assisted by the minister as interpreter, thus opened the history of their grievances."

Here the journal of Mr. Clarke breaks off, and nothing more is found respecting St. Kilda, but scattered notices and memoranda interspersed among his papers. It appears that the inhabitants laid before him a full statement of their alleged grievances, which he designed to insert in his journal. After some intermission, the journal is thus continued :

" Having left St. Kilda, we passed close under the island of Borera, northward of it, near which is a lofty naked rock, rising perpendicularly out of the sea, and so covered with Solan geese, that its top appeared at many miles distance like hoar frost ; seen through a telescope, it seemed like the top of a cake, stuck thick with caraway cumfits. They exceeded in number even the swarms of Ailsa.

" The birds of St. Kilda and Borera, which is another rock, but longer, and has a slight verdure, sloping down one side, are Solan geese, fulmars, Ailsa cocks, green plovers, two sorts of gulls, large and small, herring blackbirds, eagles, wild ducks, strannies, murrirts, scridgies, pettrils, eider ducks, and some others, unknown to me. There is one sort the sailors called ' pick-dirt,' because it pursues the gull, flying below it, and when the gull drops its dung, it catches it for food, before it reaches the water.

" Two hours and a half from St. Kilda, west wind, tide against us, we made land from the mast-head. The Flannan Isles, seven in number, lying north-west from Gallan-head, in Harris ; they are called by the natives of the Long Island, ' the Seven Hunters ;' but whence this variety of appellation originated I could not learn. The best course for vessels to steer from St. Kilda, in sailing to the Butt of Lewis, is east by north. This our experienced pilot, Mr. Ritchy, informed me.

" We soon came in view of the Long Island, leaving the coast of Harris to the right, and passing the Gallan-head, and steering across the mouth of Loch Roag, in which there are no less than thirteen islands, besides several rocks and isles of little note : Pabay, Vacasa, Wiavore, Little Bernera, Flotay, Lilwea, Bernera, Vacasay, Calvay, and Kirtay. The largest

is Bernera ; it is about five miles long, from north to south, and a mile and half broad, from west to east. It is eight miles across the mouth of the Loch, in which are included other lochs with different names, as Loch Bernera and Loch Carlowa, and it extends about thirteen miles up the country, to the end of Loch Kenhulawick, and about ten to the end of Loch Roag, properly so called, a small inlet, from which it takes its general name.

“Steering our course due northward, we at length doubled the Butt of the Lewis, the northernmost point of all the Hebrides, lying in latitude $58\frac{1}{2}$, seven miles more south than Cape Wrath, and only five leagues below the parallel of Pentland Frith, which separates the Orkney and Shetland isles from the shores of Caithness.

“Sixty leagues to the northward of Lewis, lie the Ferro Isles, subject to the dominion of the king of Denmark. They are the great mart or warehouse, as they may be termed, of smugglers, who find here a quantity of spirits for the public market of any vessel, of any nation. The inhabitants are many in number, and the islands themselves would form an interesting object to the notice of future travellers. The crew of our cutter were desirous of returning to the Cumbray Isles to profit by the herring fishery, or we should have visited them, together with Orkney and Shetland ; but having experienced from them a ready attention to all our wishes during the voyage, I could not consent to a sacrifice of their general domestic interest, for the sake of individual curiosity, perhaps beyond what it was in our power to counterbalance.

“At Stornaway, I met with some gentlemen who had lately visited the Ferro Isles. They spoke highly of the hospitality and kindness of the natives. It is a custom in those islands to reward any person who discovers a vessel with 2s. 6d. in order that pilots may immediately be sent out to them, whether they come to trade or not. They found, in one of the harbours, the clergyman of the island, fishing with his parishioners ; dressed according to the custom of the country in a jacket and breeches of sheep skin. He left them to go on shore, and returned with a pilot for the neighbouring coast, and a present of a sheep. The sheep of those islands are remarkably fine ; and they have several noble harbours.”

Here occurs another chasm in the journal. It is resumed at Ullapool, in Caithness, as follows :—

“Ullapool—founded by the British Fishing Society, within—

eight miles of the head of Loch Broon. The entrance to this lake among the Summer Islands, is extremely beautiful. The rocks, bold, steep, and craggy; cascades and torrents, pouring down from the high hills on all sides. These hills are inhabited by ptarmigan, red-deer, partridges, and a variety of other game.

"Ullapool is pleasantly situated on a small flat promontory, running out from the bottom of the hills on the side of the lake. It consists of a few new-built houses, some of which are sashed. Mr. Melville and Mr. Millar, of the Society, received us with the usual hospitality and welcome of their countrymen. The latter of these showed me the house for curing red-herrings. It is an oblong building, one hundred and eight feet long, and twenty feet wide, it is also thirty-three feet from the floor to the top of the roof. In this building, one thousand barrels of herrings are rendered fit for the London market in three weeks; and for continental markets in five or six. The process is simply as follows:

"The herrings when first caught are suffered to be two or three days in salt, which may be done even in the hold of the ship, or any convenient place. They are then very carefully washed, and purged of all external filth, to give their skins a fine golden glossy hue after they are dried. They are suspended in rows, parallel to each other, from the bottom to the top of the drying house, on small wooden spits of about a yard in length, passing through their gills and mouths. The ends of these spits rest on transverse beams meeting them at right angles. Several fires are then kindled below them. The number in Mr. Millar's was seventy-two. The fires are made by logs of wood: no other fuel will answer the purpose, and they are nice even in the choice of their wood. Oak gives a finer flavour than birch, and birch is better than beech. The best of all is afforded by a mixture of oak and birch. A nice epicure in herrings will distinguish, by the flavour, the wood that has been used in drying them.

"When they have been smoked a short time, the oil begins to exude. They then extinguish the fires, and suffer the oil to drain off. When this ceases to fall, the fires are rekindled, and the oil falls as before. The fires are a second time extinguished; a third process of the same nature takes place, and unless the herrings are remarkably large, the operation for the London markets is then at an end. For continental sale the fires must be repeated oftener; sometimes five or six times; as the change of climate, and the time required in keeping them before they are disposed of; render it necessary to have them higher dried. To eat these herrings in perfection, they should

be taken from the drying house even at an earlier period than is required for any market whatever. But the consumption of such herrings must take place on the spot; they will not keep any time in their finest state.

"We were shown the plan of the town, as it has been laid down by the Society, to regulate the mode of building which all must follow who settle here. If it is ever completed, Ullapool will be one of the finest places in Scotland, north of Edinburgh. Squares are appropriated to the different markets, and the embryo streets laid out broad and straight. It is interesting to behold the first traces of an infant settlement; to see modern-built houses contrasted with low smoking huts, and markets and manufactories marked out in swamps and morasses. Until lately, the ground behind Ullapool was a peat bog. About half a dozen trees grow near the houses. If goats were extirpated, timber would thrive abundantly among the mountains. Wherever these animals have deserted the hills, it makes considerable efforts to rise.

"The harbour of Ullapool is strikingly beautiful, appearing entirely land-locked by high mountains. An excellent road winds among these hills to the head of the lake, and from thence to Inverness, which is only fifty-two miles distant. The kilt makes its appearance upon every Highlander among the neighbouring mountains. I remarked that it was more scarce in the islands than on the main land. The reason is, that the islanders, from their seafaring life, prefer the use of trowsers.

"Mr. Millar took us on board a well-sloop belonging to him, used in conveying live cod to the London market. These vessels are curiously constructed. The middle part of the hold is perforated by several hundred holes, which admit the sea water into a space that occupies at least one-third of her bottom: so that she floats, as it were, on the upper deck. A funnel, in which the water rises very near to the deck itself, communicates air to this well; which serves at once to keep the fish alive, and to prevent the great body of water from blowing up the vessel; which would inevitably be the case, if the air was excluded. In this well they convey one thousand four hundred cod to Billingsgate, besides lobsters, and occasionally turbot, &c. The lobsters have their claws tied to prevent their fighting and killing each other. The cod live very well in confinement, but salmon being a livelier and more spirited fish cannot endure it. What seems extraordinary, the roughest weather suits them best. If a calm falls, or by stress of weather they are absolutely compelled to enter harbour, which they always avoid if possible, the fish die, for the

change of water is not effected so rapidly as while the vessel rolls.

"The well-vessels are allowed to sail faster, and to bear greater stress of weather than other ships; for they have the united advantage of a flat and a round bottom acting together at the same time. But this circumstance I have only on the authority of the proprietors of those vessels, and do not know whether the fact will be admitted by experienced mariners.

"In the peat-bogs, all over Ross-shire, as in many parts of Scotland, they find quantities of pine and fir-trees, a considerable depth below the surface. At Ullapool they use slips of this wood for candles and matches, which burn with a clear, bright light. But I was more surprised to find the ropes of the fishermen's boats also of the same materials. They twist the long slips of it into ropes and cables. Oaks are also found, the wood of which is hard enough to turn the edges of their sharpest weapons. On the north coast of Caithness, half a league from the shore, Captain Melville assured me, in heaving up an anchor, they once brought up a large mass of peat-bog, which lay below the sand.

"We lay becalmed among the summer Islands, which called to imagination those of the *Ægean* sea; but instead of the subverted shafts of the fine Ionic pillars, we saw innumerable seals, rolling on all the shores. Took quantities of dog-fish; the people here will not eat them; they are eaten in most parts of Scotland and in the Isle of Man.

"August 7.—Found ourselves close into Lewis; the whole visible extent rocky and barren. Tacked and made for the Shant Isles; by my glass they appeared a series of basaltic pillars. As we approached in the boat, the grandeur of the columns struck us with surprise. The whole of these islands are the ends of basaltic pillars rising out of the sea. They are not equal to Staffa, but full as curious as the Giant's Causeway. The columns are higher than the latter, and larger than any in either of them. I measured the diameter of one that was six feet, and the fissures of separation were four or five feet.

"At the top of Carivelan, the largest of these isles, I found the ends of the columns peeping through a very thick verdure. Saw no inhabitant, but one solitary girl, with bare feet, who followed me about with such a volubility of Gaelic, that I am certain she was earnest to communicate something, but I could not comprehend what. There is a single house on Ilanakill, which I believe is the only spot inhabited on the islands.

"There is a range of rocks, called Galta-*bec*, and Galta-*more*, extending west from Carivelan, which are entirely com-

posed of naked shafts of basaltic columns, shooting boldly out of the sea ; on which nothing is seen but swarms of birds, Solan geese, Ailsa cocks, and other sea-fowl. In one of these, Galta-bec, the rocks rise one hundred feet perpendicularly out of the sea. The height, therefore, of the columns in the larger neighbouring isles may be conjectured. Their size is enormous. Between Galta-bec and Galta-more is a smaller rock, perhaps about thirty or forty feet high, in which the columns lie perfectly horizontal one upon the other. Several bending pillars, as at Staffa, are seen here. And in other instances they are piled together, all leaning to one point, in a conic form, like a stack of hop poles, in Kent.

"How little have these islands been explored. Perhaps still beyond the Shant towards Iceland, or among the Feroe Isles, similar phenomena may be discovered. From the top of Carivelan, I saw similar rocks, appearing above the sea at intervals, and reaching towards Sky. When we returned, we found the crew busily employed in taking cod and noddies. They showed me a curious experiment with the heart of a cod. When taken out and exposed to the sun for some hours till almost dry, it still retained symptoms of life, for whenever it was touched, it became violently agitated for a minute or two.

"After leaving these islands, we coasted along the eastern side of Lewis, till we came to Harris. The day being very clear, we saw the lofty and pointed top of Harris ; the country exceedingly mountainous. It was curious as we sailed to observe the different character of the mountains in Harris ; and those opposite in Sky, and the main land. The mountains of Sky are almost all cones with broken tops, exactly like sugar loaves with their tops broken off. Nothing could exceed the beauty and extensive scenery in the channel between the Long Island and Sky. Whichever way we looked, the sea like an immense lake appeared bounded by distant and lofty territory. To the north we commanded the Shant Isles, the coast of Harris, Lewis, and the north-west coast of Scotland, even to Cape Wrath, and the Sugar Loaf* on the west coast of Sutherland, which was plainly visible at twenty leagues distance. To the south-west, we saw Benbecula and South Uist ; and to the south, the undulating mountains in the north of Sky ; to the west, the sound of Harris, North Uist, with the entrance to Loch Namaddy ; to the east, the main land, with all the lofty mountains of Ross-shire.

* "This mountain, of the most perfect conic form, is on the west coast of Sutherland, about twenty miles from Ullapool. On its summit is an inverted cone, or crater filled by a pool of water."

"We passed the sound of Harris, in the west entrance of which are the islands of Pabba, Boreray, and Bernera. Several smaller isles almost shut up the eastern side, which, with a number of sunken rocks, renders it a very intricate passage for small vessels; and for large ones it is impracticable. The herring fleet sometimes passes through it; but it is a passage pregnant with danger and difficulty. Off the west coast of North Uist lies the Hiskere* Island, or isles, where Lady Granger was a year prisoner, before she was removed to St. Kilda. Towards evening, thick weather again came on. We saw the sun for the first time this day, since leaving Barra; made for Lock Bracadile, in the western coast of Sky; beat about all night with contrary wind and tide.

"August 8th.—We found ourselves off Macleod's Maidens, three pointed rocks that rise perpendicularly out of the sea, and stand in a line beneath the cliffs.—Entered the beautiful harbour of Loch Bracadile. Mr. Pennant calls it the Milford Haven of these parts; and he could not have used a happier comparison, for both in the security it offers to vessels, and the scenery near its shores, it is very like it. As we came in, the appearances of basaltic columns were very numerous on the south side of the entrance. A fine cascade rushed down the hills immediately opposite the place where we cast anchor, doubtless augmented, if not altogether caused, by the heavy rains that had fallen. Sky should be called the Pluviose Isle; for from all the accounts I collect from other authors, as well as my own experience, it is constantly subject to wet weather. Having observed a prodigious quantity of gulls settled near a creek, as we came in, we took the boat to examine what the cause of it was. Our sailors were in hopes a shoal of herrings had been cast on the shore. As soon as we arrived we found the country people in crowds, filling their baskets with small fish, which lay in myriads on the shore. They called them cuddies as a general appellation, but I found them to consist of the young, of the lithe and various other fish found in these seas. Mr. Donald Grant, the taxman of the land, then explained to me the reason of their appearance. His poor labourers and tenants, according to a usual custom, had built a circular rampart on the beach with loose stones. The tide overflowing it filled the interior space with these fish, and after retiring through the interstices of the stones, left the fish an easy prey, exposed upon the sand.

* "Sker, or Skere, in Gaelic, signifies a rock. Hiskere is the name of several islands in the Hebrides."

“ We returned to the vessel, and took a fresh set of rowers, to land in search of eggs and milk, our stock of fresh provision being nearly exhausted. We landed upon a part of the beach where two boats seemed to indicate a neighbourhood of inhabitants ; but we had to walk two miles before we discovered any thing like a hut. At last, after walking through a good deal of cultivated land, we saw an assembly of several huts ; and entering one of them, Mr. Maclean despatched a messenger to Talliscar, to inform Mr. Macleod, his uncle, that on the following day we purposed making him a visit. Our search for eggs and milk was not so successful. They offered us extremely sour butter-milk to drink, but told us it was not the season for eggs, and that milk was not an article of sale with them. I thought I perceived symptoms of that mistrust which we had sometimes met with in the northern Hebrides ; but which the islanders do not usually show to strangers. The reason of this was soon accidentally discovered. I let out, that we belonged to a revenue cutter ; upon which they exclaimed, ‘ A revenue cutter ! Ay, we thought so—they are seldom welcome any where ! ’ Our mate afterward informed me, that it was most probable, they had wine concealed, from the wrecks which lately occurred among the islands. He said they discovered in a place as little liable to suspicion, as much contraband tea as came to two thousand eight hundred pounds sterling ; part of which they had concealed in cellars and great quantities in artificial excavations under ground.

“ After a heavy fall of rain, the evening at last cleared up, and a scene of uncommon grandeur opened towards the southern part of the Loch. A series of mountains called the Cullen Hills, broke forth from among rolling clouds, whose pointed and craggy summits were characterized by the most violent convulsions of nature. They seemed altogether to have once formed an enormous cone, the base of which only now remained, on which were various other cones, some perfect in their forms, others torn and distorted, but all with sloping lamellated sides.

“ Early on the following morning, we set out with Mr. Maclean on our expedition to Talliscar. The walk was about six English miles. We passed Artrech, the village we had visited before, and continued to proceed through a heathy glen, at a small distance from the shore. Basaltic pillars appeared more or less visible on each side the glen, increasing in grandeur and variety as we advanced, till at last the beautiful valley of Talliscar, all at once, opened before us. In the middle of this valley, surrounded by trees, we discovered the hospitable mansion to which it was our fortune to go. We descended.

into it by the side of a noble cataract, which, with several smaller cascades, contributed its waters to the bed of a river that flowed through the valley.

"The vale of Talliscar is surrounded by grand and interesting objects. It resembles that of Festiniv in Wales; but the vale itself is smaller, and the mountains which enclose it are characterized by bolder features, and more lofty summits. Close behind the house an enormous mountain, of the most remarkable appearance, rises abruptly to a prodigious height, the whole of which is entirely composed of basaltic pillars, whose broken extremities are alone visible, through the vegetation which covers it. Near the foot of this is seen a group of small huts, tenanted by goatherds and peasants, who tend the numerous herds of cattle which are seen grazing on the sloping sides of the mountains and in the valley below. The western side of this valley opens to the sea, and on the shore may be found an infinite variety of minerals; limestone, granite, slate, &c. petrified wood, and even pit-coal, in its natural state. Of the coal it must be observed, that various indications of it may be seen over the whole island, which has induced many of the inhabitants to prosecute their researches after so valuable a commodity to a considerable extent. These excavations have been made at different periods, sometimes even to the depth of seventy-two fathoms, but always with the same consequence, and without success. They found coal, but never in sufficient quantity, and always near the surface.

"Upon our arrival at Talliscar, we found the Colonel and his lady waiting to receive us in an old hall, whose walls still supported the insignia of their ancient chieftains. The enormous claymore, which their ancestors had wielded in the contests of their clans, was suspended from the wall. Their servants wore the kelt and tartan; the hearth was smoking with peat, and the table laden with the produce of their lands. Among the domestic tenants, I could not avoid noticing a wood pigeon, which had perched, with all the familiarity of a tame bird, on a pair of deer's horns in the passage, and seemed perfectly unconcerned at our approach.

"Leaving Talliscar, with marks of even parental kindness from Colonel and Mrs. Macleod, we proceeded back on foot, by the village of Artrech, once more to our cutter; and getting under weigh we took our course due south, and coming once more in view of the hospitable mansion of Talliscar, hoisted our pendant and ensign staff, and gave it a salute with our guns, which we could hear acknowledged and returned, by the sound of some small artillery soon after among the trees in that beautiful valley. We passed, with a fair wind, once more

between the islands of Canna and Rum; and I was happy to find the original description I had given of that island, if any thing still more strongly confirmed, by a second view of it. The evening being clear, we commanded a fine view of the interior summits and their forms, which have all the same character. It is unnecessary to repeat what has been already said with regard to this island; but I cannot take leave of it, without recommending, in the strongest terms, its various curiosities to the attention of future travellers. Hitherto it has been little noticed; but if its natural productions and curious fossils were insufficient to attract more general notice, I will promise that the scenery, in approaching its bold and lofty shores, the astonishing grandeur of the natural arch I have mentioned, will amply repay the artist, or any traveller who shall deem it worth his while to profit by the recommendation I have made.

"Having seen the basaltic pillars of Sky, those of Canna will be found exactly of the same description. The appearance of the land in each, rising in regular gradations, from the tops of one range of columns to the next above them, is the same in both; and there can be no doubt but they are coeval with each other, although since their original formation, divided by the encroachments of the sea. I did not visit the small isles of Egg and Muke, but their appearance, as we sailed from Ardnamurchan, was the same as that of Rum. We reached Col at midnight, touching at the north end of it for the purpose of landing Mr. Maclean, who had so kindly accompanied us during great part of the voyage, and in the morning found ourselves again passing down the sound of Mull, from whence we steered, by the island of Lismore, to Oban. The ruins of Dunoly Castle form a very interesting object as you enter the beautiful harbour of Oban; which is formed by the isle of Kerrera, lying across the mouth of a small bay; and it appears land-locked to the north by the island of Lismore, lying about three leagues from the town."

(Here follow some geological remarks, respecting the country about Oban, which, in compliance with the author's injunction are omitted.)

"About two miles from Oban, beyond Dunoly, at the mouth of Loch Etive, is Dunstaffage. Both these edifices are erected on lofty eminences above the sea. Of Dunstaffage it is unnecessary to say much, as Mr. Pennant has given a copious description of it: the most important part of which my reader

will find in a note below.* The ivory figure there mentioned is still preserved, and was shown to us by the owner. It is most faithfully represented in his work.

"The remarkable echo near the ancient cemetery of the castle, I did not think equal to the accounts I had heard of it. A ludicrous trick was practised by means of it, a few years ago, upon a fraudulent miller, who was admonished by the echo to alter his measures, upon pain of going to hell, as he was reading the inscriptions on some of the tombstones. This unexpected menace from an invisible monitor so alarmed the poor man, that in a fit of consternation, he fell trembling upon his knees, and was found by some of his customers making due acknowledgment of his past transgressions.

"The cemetery of Dunstaffage is still used by the inhabitants of Oban, and the neighbouring country, as a place of burial.

"A curious species of theft has been practised of late years by the poor of those parts, which is likely to create no small degree of confusion among the antiquaries of future periods. They frequently purloin the sculptured stones from the tombs of Icolmkill, to place over the grave of any person who happens to die, so that a goatherd or a fisherman, proudly decorates the place of his interment with the hieroglyphics, the heraldry, and the effigies of Caledonian kings. Some of the modern inscriptions of Dunstaffage have nevertheless a more genuine characteristic of recent masonry. As a proof I shall insert the following curious memorial which I copied during my visit to that place.

* The following appears to be the passage intended for insertion by Dr. Clarke :

"This castle is fabled to have been founded by Ewin, a Pictish monarch, contemporary with Julius Cæsar, naming it after himself Evonium. In fact, the founder is unknown ; but it is certainly of great antiquity, and the first seat of the Pictish and Scottish princes. In this place was long preserved the famous stone, the palladium of North Britain ; brought, says a legend, out of Spain, where it was first used as a seat of justice by Gethalas, coeval with Moses. It continued here as the coronation chair, till the reign of Kenneth the Second, who removed it to Soane, in order to secure his reign, for according to the inscription,

*Ni fallat fatum, Scoti quocunque locatum
Invenient lapidem, regnare tenentur ibidem.*

"Mr. Campbel showed to me a very pretty little ivory image, found in a ruinous part of the castle, that was certainly cut in memory of this chair, and appears to have been an inauguration sculpture. A crowned monarch is represented sitting in it with a book in one hand, as if going to take the coronation oath.

"The castle is square ; the inside only eighty-seven feet ; partly ruinous, partly habitable. At three of the corners are round towers ; one of them projects very little. The entrance is towards the sea at present by a staircase, in old times probably by a drawbridge, which fell from a little gateway. The masonry appears very ancient ; the tops battlemented. This pile is seated on a rock, whose sides have been pared to render it precipitous, and to make it conform to the shape of the castle.—Pennant's *Scot. Voy. to the Heb.* vol. ii. p. 354.

Here (with her Predecessors and mine
 SCAMDLE & CRACKEIG) lays the corps
 of, Beatrix, Campbell, Spous. to,
 Arch. Campbell, Tackman, of
 Clachanail, L. & daughter, to
 Don: Camp: of, Scamidal, who DY
 ED, at Clachan, the, 34: Octbr
 1741 aged, 34, this Monument
 was, laid, over, her, grave. By
 The, above, Archd: CAMP: her Hus.
 band.
 Snatched, from, me, is, my, modest, dove.
 by, death
 Whose, pious, virtue, must, outlive, her,
 breath
 Her, mournful, mate, & offspring,
 must, deplore.
 So, quick, a, parting, tho, to, joys, e'er more
 We, mourn, because, she's, happy, I resign
 Her, Dust, &, hope, we, shall, together, shine.

(Here is a representation of the monument.)

“ Opposite the entrance were these mottos,

‘ Death comes	} round the hour-glasses.
Time runs	
‘ Memento mori	round the skulls.
‘ Arise ye dead, and come to judgment.’	

“ A most ludicrous figure, like a Bacchus on a sign-post, blowing two trumpets. On the outside, each side the door, a skull and single thigh bone.

“ Seals we observed in great numbers near the bay of Oban. I did not know, until I came to Scotland, that it was possible to tame a seal, and render it domestic. Mr. Ritchy brought up a young one by feeding it with milk, which followed him, and would keep up with a four-oared boat, in the water. It was accidentally mistaken for a wild one, and shot. Otters are frequently tamed in the Western Islands, and taught to fish for their masters. Mr. Maclean, of Col, had one of these animals. They will resort to the sea, catch young salmon, and bring them home entire.

“ Some years ago, a cave full of human bones was accidentally discovered in one of the cliffs of Oban, round the point, a short distance from the custom-house. I went to see it, and found several skulls, and other bones lying in it. The mouth had been stopped up with stones and rubbish. The tradition of the inhabitants respecting this cave is, that a plague once raged in that neighbourhood, and that infected persons were sent to that cave, and regularly supplied with provisions, laid every day upon the beach, about forty yards below it. That in process of time, all died who were sent there, and after their bodies had lain some time, the neighbouring inhabit-

ants came and closed up the mouth of the cave. Mr. Stevenson informed me, that he remembered its being discovered; and that a most intolerable stench prevailed there for some time after it was opened.

"Having long felt a curiosity to visit the site of the ancient Beregonium, once the capital of all Scotland, and being offered horses by Mr. Hugh Stevenson, jun. we set out in company with that gentleman, on the morning of the 16th of August. English readers, when they hear of excursions in the dog-days, will suppose the heat of the weather no incitement to enterprise. But they are little aware how great an alteration of climate is felt, in a latitude so little more remote than that of London. We were, indeed, informed, that the season had been more unfavourable during the summer of 1797, than had ever been remembered in Scotland. But the months of July and August are, more or less, always attended with rain. So unfortunate were we in this respect, that a sunbeam was a luxury hardly once experienced during the whole month of July. I may safely affirm, from the 12th of July to the 17th of August, we never saw a sky perfectly unclouded. One day of sunshine we experienced, and about three others of tolerable fair weather. Fortunately for me, these generally occurred during my visits to the mountains.

"Our journey to Beregonium was attended by every obstacle that wind, hail, and rain could interpose. I mention these circumstances, because, though trivial in their nature, they occur with so little intermission in the country I am describing, that travellers should be made acquainted with them, lest they undertake an expedition of the same nature, improvident as to its consequences. As the state of the weather ought never to be a reason for inactivity or neglect, every one should be sufficiently fortified against the changes of it, to support the most unfavourable attacks.

"In our way, we visited once more the venerable ruins of Dunstaffage. About a mile from Oban, in the road to this castle, we passed a piece of water, exactly resembling the lake D'Agnano, in Italy. This lake, commonly called Pennysfuir Loch, from a farm near it, is distinguished among the natives by the appellation of Loch Duigh, or the black lake.

"Leaving Dunstaffage, we crossed the narrow mouth of Loch Etive; by what is called the Connel ferry. The tide rushes through this channel with such rapidity, that it sometimes forms a cascade of six feet. The ferry, in consequence, is frequently dangerous, and always requires the cautious management of an experienced boatman. The old pilot who conducted us over, with our horses, had attended the ferry up-

wards of sixty years, and the management of it has been in the same family, handed from father to son, for three hundred years. The mode by which we crossed it reminded me of the rivers in Piedmont, the passage over which is exactly the same. The boat is launched from one side of the river, and intrusted to the torrent, which carries it with great rapidity down the stream, the men all the while tugging at the oars, till at last it reaches the opposite side, a considerable way lower down. By constant practice, the ferrymen are dexterous enough to reach generally the same point, where there is a sort of quay for landing; but this is not always the case, nor was it so when we crossed over. Sometimes the eddies are violent enough to turn the boat round, by which they lose the command of her, for a few seconds, and you are then hurried somewhat lower down the stream. Notwithstanding the perilous nature of the stream itself, the uncertainty of the old crazy boat they use, frequently thronged with passengers and terrified horses, who betray great uneasiness in passing, I heard of no instance in which an accident had been fatal to any one.

"About two miles* beyond the ferry is all that remains of Beregonium. When I state what this *all* amounts to, few will deem it worth their while to explore it, unless that local enthusiasm which Dr. Johnson deprecates the absence of, upon 'any ground that has been dignified by wisdom, bravery, or virtue,' should lead them to a barren rock, without a vestige of human habitation. Of such a character are, at this moment, those celebrated plains, which, at the confluence of the Simois and Scamander, supported the palaces and walls of Troy. Yet where is the man who would not rejoice to land upon the Si-gæan promontory, to witness scenes so consecrated in the page of history?

"The situation usually appropriated to Beregonium is a rock of slate, which rises, as it were, insulated in the middle of a plain, at the foot of lofty cliffs; and on this rock, I thought, but it might be conjecture, I could trace the circular basis of a fortress like those commonly attributed to the Danes. As I was employed in determining the traces of this edifice, a peasant from the plain below brought me a piece of pumice stone. Upon inquiry, I found that several fragments of the same nature were found at the bottom of the rock, but that they were all derived from one spot at the other end of the rock. Being conducted to the place, I found a mass of vitrified matter, upon

* "One computed Scotch mile; according to our computation, two miles English. Perhaps both are inaccurate."

a basis of slate, facing the west, on the summit of the rock. In this mass I observed a very extraordinary effect of fire upon a heap of stones, some of which were completely vitrified, and appeared covered with a glossy substance. Others like the substance found at the bottom of furnaces in the glass houses. Others again were reduced in part to pumice, but not entirely; the outside being pumice, and the interior part of the same stones less affected by fire. Others again remained in their original state, except being a little scorched on the outside. These probably owe their present appearance to artificial fire.

"In the plain below the rock, are two causeways, which still bear among the natives the appellations of Meal street and Market-street. That which is called Market-street is a mound or bank, like that of Romney Marsh, in Kent, and extends from the rock along the sea-shore, to the opposite cliffs. It appears to have been originally raised to prevent the incursions of the sea from the plain behind it, and has since received additional strength from the beach which has been thrown up against it. It is very probable, whatever might have been the original purport of its construction, that during the existence of Beregonium as a city, provisions were here exposed for sale, as it offered so fair a mart, in the immediate vicinity of those who came to the shore with their boats from the neighbouring country: and probably from this circumstance, which was a consequence and not a cause of its being erected, it obtained the appellation of Market-street.

"In the plain behind this embankment, is one of those upright stones, often noticed by Mr. Pennant, and common to all the Hebrides, the main land of Scotland, the Orkney isles, and the south-western counties of England, particularly those of Cornwall and Devonshire. Near this stone a number of human bones were lately discovered by the peasants in tilling the ground. A kind of coarse pavement was also found, not far from the same spot, but not mosaic; merely a rude layer of very irregular stones. A few years ago, in picking some stones from a neighbouring rock, one of the labourers found about half a dozen thin silver coins. I could not discover what afterward became of them; nor could any other account be obtained of the coins themselves, than merely what related to their original discovery.

"When we look back to the remote periods in which the city of Beregonium must be supposed to have existed, we are not to wonder at the slight vestiges which now appear of a metropolis once so celebrated. It is highly probable, that a fortress, surrounded by huts, constituted all from which those vestiges are now to be derived.

"At present, so destitute is the spot on which that metropolis is supposed to have been founded, that I could not contemplate the site of it without calling to mind the observation of a British nobleman, in Italy, whose remarks afforded no small degree of entertainment to those of his countrymen who resided with him in that country : 'When these antiquarians,' said he, 'explain the nature of a thing that is, I can listen to them with some degree of patience ; but when they drag me about to show where something *has been*, I can bear it no longer !' From Beregonium we returned by a different route, which, instead of passing by the castle of Dunstaffage, takes a course more towards the east, and leads by an excellent road through glens and mountains, characterized by genuine Caledonian wildness, to Oban.

"It is impossible to leave Oban, without noticing the important consequences, which have resulted to that place, from the talents and industry of a single family, in the short period of twenty-six years. When the elder of two brothers, Mr. Hugh Stevenson, arrived there, a single thatched hut, with about five persons, constituted the whole of what has since, by their exertions, risen to a populous and flourishing town. In the year 1791, a list of the inhabitants was made by Mr. John Stevenson, at the request of the Duke of Argyle, when they were found to amount to six hundred and fifty-nine souls. And in the year 1797, their number had increased to seven hundred.

"We found at Oban a very pleasant and commodious boat, neatly equipped with sails, and mounting four oars, for the express purpose of conveying passengers to the different islands and places in the neighbourhood. Having agreed with the master of it to take us to Fort William, we took leave of our cutter ; nor was it without painful emotions, that, as we left it, we heard the roaring of her guns in a salute, and observed the men in the yards preparing to give us the last proof of their zeal in our service by three hearty cheers.

"Having cleared the bay of Oban, we passed along the eastern extremity of Lismore island, which has been sufficiently described in Mr. Pennant's work. Near this end of it, resides Mr. M'Nicol, celebrated as the author of an answer to Dr. Johnson. He has been reproved for retorting too malignantly upon his antagonist ; but I must confess the perusal of his work afforded me both instruction and amusement. Let those who condemn Mr. M'Nicol, consider the nature of the provocation he had received ; let them peruse the errors and misrepresentations of Johnson, on the spot from whence they originated ; and having so done, their determination will perhaps incline very differently.

"The passage to Fort William by water is infinitely preferable to the journey by land ; on account of the ferries and other inconveniences which occur in the road, and occasion very unprofitable delay. With a west wind it is easily made in four hours, and the scenery during the voyage, if not characterized by any great degree of variety, is at least grand enough to absorb the attention during so short an interval. The circumstances of the tide are to be considered, as at the return of it through the narrow straits which join Loch Linnhe to the interior bay on which Fort William is situated, the current is so rapid that a passage is not easily obtained. This channel, called the Coran ferry, is about half a mile across ; but the water is deep, and ships of any burden may pass through at high water. After passing these straits, the mountains on each side appear of prodigious height, and rise abruptly from the surface of the water. Notwithstanding the steep declivity of their sides, they appear to be covered with a thin verdure, in many instances, even to their summits. During our passage, we saw several seats near the water's edge. Among others, the Marquis of Tweeddale's, pleasantly situated among trees, backed by mountains, and fronted by water.

"Upon our arrival at Fort William, we found the inhabitants busily occupied upon the shore in mending their nets, and preparing their boats for the herring fishery during the ensuing night. Vast quantities of fish had been taken that morning, and from the scarcity of salt which prevailed, they were selling at that moment for a groat per hundred. Some of the fishermen told me, they could take as many fish as they pleased, but as the buyers were few, and the price low, they were hardly worth the trouble of bringing to shore.

"The road from Fort William to Fort Augustus, and all the way to Inverness, is excellent. Notwithstanding which, it cost us nine hours to get to Fort Augustus, which is only thirty miles. The only mode of conveyance was upon the shelties of the country, and these were such miserable, infirm, and aged animals, that it was painful to compel them to proceed. Travellers would do well to order a chaise for this purpose from Inverness. The expense is nearly the same, and if there is much baggage, such a plan would be more economical. About a mile from Fort William, the road passes close to the ruins of Inverlochy Castle, from which it is said the Duke of Argyle took the plan of Inverary.

"After leaving Inverlochy, we passed under the foot of Ben Nevis, which is the highest mountain in Britain, being 4370 feet above the level of the sea. Its summit was perfectly cloudless during the first part of the day. The view from its top is

reported to be, as may be conceived, amazingly extensive. It is not without a sigh I confess my indolence in not paying a visit to its summit. It is almost the only instance in which I have passed the base of any mountain, without exploring the 'aerial solitude' of its top, whatever might be the weather or the season. At the same time, I must add, that the view alone was no inducement to such an undertaking. On the tops of mountains, we are best enabled to ascertain, with accuracy, their productions, whether fossil or vegetable, which are always pregnant with information. If the weather be favourable, it is from such a situation one is best enabled to become acquainted with the topography of the country; and if otherwise, something may be learned from the production and appearance of the mountain alone. Ben Nevis is the last of the range called the blue mountains, which extends through all Scotland from east to west. It was now the middle of August, and snow lay in abundance far below its summit, which is said to continue there through the year.

"Descending a hill about eight miles from Fort William, we crossed the High Bridge, consisting of three lofty arches, thrown across the perturbed current of the river Spean. It was almost immediately after crossing this bridge, that in ascending the declivity on the eastern side of it, my attention was caught by a remarkable artificial rampart. I cannot find the least notice taken of it, by any author, or in any traveller. It lies to the left about two hundred yards from the road upon an undulating and barren moor. The form of it is a perfect square, raised about sixty or eighty feet, its sides sloping gradually, and with great evenness. It appears evidently to have been some Roman station or camp, but its present state is so perfect, all its angles are so nicely and regularly determined, that it is extremely singular no travellers have either described it from their own observation, or gathered some account of it from the reports of others.

"A small inn at Letter Findlay, about half way from Fort William to Fort Augustus, offered us refreshment for ourselves and our miserable ponies. In the wildest parts of Scotland, where not only the luxuries, but most of the comforts of life are wanting, one frequently meets with a delicious repast in the productions of their dairies. The women of the house placed before us, on a coarse but clean cloth, a large bowl of cream, fresh butter, goat cheese, curds, whey, fresh eggs, and oat-cake.

"From Letter Findlay the scenery is water and mountains to the whole way to Fort Augustus. On the opposite side, as you leave Letter Findlay, are seen the ruins of a cas

ble, among some trees. The road continues by the shores of Loch Lochy and Loch Oich, until on approaching Fort Augustus, the more extensive surface of Loch Ness, surrounded by high mountains, whose sides are beautifully adorned with hanging woods, opens to the view. The miserable inn at Fort Augustus is almost the only mansion, except a few huts, out of the garrison. We found it-completely filled with smoke and company, the latter of which had assembled to see the pupils of a dancing master, on the evening of their practice, and to form a little ball among themselves. Happening to express to the master of the inn a wish to see the Highland reels, as danced by the natives, I received a very polite invitation from the assembly room, purporting that my company would be welcome among them, and that I might stay or retire as late as I pleased.

"I found the gentlemen in the genuine Highland dress, with their kilts and tartan hose, dancing with all that vigour, vivacity, and alertness, which is so peculiar to the Highlanders in their favourite reels. The infinite variety of their steps, the snapping of their fingers, the exactness with which the sound of their feet and hands marked the time and the different character of the tunes, as they varied in succession, amused us highly. Many, even of the children, gave an elegance and expression to their motions, such as I had never before witnessed in the most skilful of our London Bacchantes.

"The journey from Fort Augustus to Inverness, is by much the most interesting of the whole tract which is called the Chain, and perhaps is not equalled in Scotland. Immediately upon leaving Fort Augustus, the road quits the lake, and winding over the mountains proceeds, by several small pools of water, among others a lake called Loch Turf, and through a wild country, for fourteen miles to the Rumbling Bridge, and the famous cataract called the fall of Fyres. Here you are again presented with a beautiful view of Loch Ness, lying far below you. Some time before you reach this cataract, the unusual appearance of trees adds greatly to the beauty of the scenery. The Rumbling Bridge is the first object to attract your attention. It is a few yards out of the road, about a quarter of a mile before you arrive at the cataract. Some persons have thought it as well worth seeing as the fall, but there surely can be no comparison. It consists of a single arch thrown across a roaring and tremendous torrent, which, rushing down a chasm of solid rock towards the bridge, proceeds afterward boiling and foaming among huge blocks of stone, towards the greater fall. The bridge itself trembles as you stand upon it, with the violence and fury of the surge below.

After having visited the Rumbling Bridge, the road itself conducts the traveller close to the fall of Fyres. For some time before you approach it, a loud noise and thick rising mist, which ascends far above the highest point of the cataract, give notice of its vicinity. The view from the road is considerably above the fall; but, looking down, a striking spectacle presents itself. Having seen all the principal cataracts in Great Britain, I can confidently aver, that the fall of Fyres is superior to any of them. At the same time it must be stated, we saw it in its greatest glory; after a season of more rain than had ever been remembered in Scotland, during the summer months. But circumstances less liable to alteration, than the state of the atmosphere, equally conspire to give it a pre-eminence. The scenery around it is of the boldest character. The broad and distant surface of Loch Ness, rocks, mountains, woods, and precipices, all afford their tributary characteristics, of vastness, majesty, and grandeur. The fall itself is uninterrupted in its course by any intervening mass. In trifling cascades, interruptions of this kind are not only ornamental, but sometimes absolutely requisite to the production of effect. The case is far otherwise in cataracts of more importance. When a torrent is precipitated from any considerable height, the whole body of water breaks spontaneously into enormous rolling volumes of surge, foam, and vapour, infinitely grander, and more varied than any effect which an interruption to its progress could produce.

"I have stated that the fall of Fyres is superior to any cascade in Great Britain. It may also be necessary to add, that it is equal to those of Tivoli, but inferior to that of Terni. It differs from the great fall of the Monach, near Aberystwith in Cardiganshire, in being composed of one entire cataract, whereas the latter consists of five separate falls, all of which appear to unite in one point of view. The height of the fall of Fyres was lately taken by a party of gentlemen, one of whom was let down by a rope to the bottom of the torrent, in which perilous situation, he measured it from the surface of the water below to the beginning of its fall, and found the distance 470 feet.

"From the fall of Fyres the road passes by a gentle declivity to the General's Hut, a small inn, about a mile distant. The number of passengers who had thronged it on that day, had entirely subverted the little economy of its owners, and thrown every thing into confusion. We found the eldest daughter weeping over the fragments of a broken tumbler, which though a trivial loss in places less remote from commercial intercourse, was an important consideration here, as

there was not another to be had. To my great surprise I heard that the poor woman of the house had risen only four days from her accouchement, and at that moment was laboriously employed in washing dishes, with her bare feet in a puddle of water. Her husband assured me it was a matter of no astonishment, as she never indulged in any confinement upon that account, and added, 'On the morning she brought me this fine boy, she made dinner for fifteen persons.'

"The appellation of the General's Hut was given to this place, from the circumstance of General Wade having made it his place of residence during the time he commanded the forces employed in constructing the various military roads through the Highlands of Scotland. Nothing could surpass the beauty of the ride from the General's Hut to Inverness. For many miles the road passes through a continued grove of hazel trees, among which occasionally are seen the mountain ash, whose branches bend beneath the weight of its blushing berries, the oak, the white poplar, and the weeping birch. On the other side the lake, surrounded by trees, appeared the ruins of Urquhart Castle, an edifice renowned in other times. It consisted of seven great towers, and it is said to have been erected by the Cumins. It was demolished by Edward the First.*

"After travelling thirteen miles in this manner, by the side of the lake, the road is continued to its north-eastern extremity five more from the kirk of Dores to Inverness; leaving the Bunatria of the Romans to the left, and passing the whole way parallel to the river Ness. On entering the town of Inverness, the first object that occurs worthy of note, is the ruins of Macbeth's castle, in which Duncan, King of Scotland, was murdered. It has undergone various appellations, being at that time distinguished by the title of Fort George, and continued in good preservation, till it was blown up by the rebels. It formerly constituted a very great ornament to the town, being situated on an eminence above the river, and overlooking the whole of Inverness, with its bridge, harbour, factories, and churches. It was never a place of strength since the invention of gunpowder, as it is commanded by a hill above, but it formed a beautiful barrack. The engineer employed in laying the train for the destruction of this place, was carried to a

* "Tour through Britain, p. 242.

"About four miles to the westward of this castle, on the top of a very high hill, is a lake of cold fresh water, thirty fathoms in length, and six in breadth; no stream running to it or from it. It could never yet be fathomed; and at all seasons of the year it is equally full, and never frozen. Ibid."

great height by the blast, and fell into the river. An old man who attended us to the spot, said he saw the accident happen, and that the engineer's dog was blown into the air with his master, but escaped with a trifling lameness, in consequence of the disaster.

"The evening was growing dark as we entered Inverness. The appearance of the shops by candlelight, was more splendid than we expected to have found them in this part of Scotland; but the town has been improving fast for many years; and those who borrow their ideas of it from the accounts by De Foe, and former travellers, would hardly believe it could be the place they have described.

"The morning after our arrival, we rode to the field of Culloden, and having procured upon the spot one of the peasants, all of whom retain by heart the whole history of the memorable battle fought there, we hastened to indulge a melancholy contemplation over the graves of the slaughtered clans, who with valour worthy of a better cause, fell victims to a mistaken zeal. The line preserved by the Highlanders upon that occasion, is distinctly marked along the plain, by the number of their graves. They were interred exactly as they fell, their bodies being guarded during the night after the action, and the following morning all the peasants of the neighbouring country were summoned to assist in giving them such a burial as the place would afford. Our guide assured us, that his father assisted at their interment, and that they laboured two days incessantly before they were all committed to the earth. Two thousand fell during the action and in the retreat. Our great moralist, Johnson, observes, 'The man is little to be envied, whose patriotism would not gain force upon the plain of Marathon;' but what degree of apathy must characterize the traveller, who, in crossing the field of Culloden, could pass the solitary graves of the Highlanders without a sigh? Never was a spot more calculated to awaken emotions which obliterate the present in memory of the past. The scene is a wide heath, whose uniform and melancholy surface is only interrupted by turf-grown sods rising at intervals, where, hushed in death, repose the bodies of brave but ill-fated Caledonians. Wherever these mounds appear, the heath no longer grows, but the white clover and the daisy, mingled with a fine green turf, betray the deposit mantled by their verdure.

"Our guide with his spade gently raised the turf from some of these rude tumuli as we passed. We found them filled with the bones and skulls of bodies, which seemed to have been hastily covered without much attention to order or dispo-

sion. In some of them were shoes and rotten pieces of wood. Flints, nails, balls, bullets, fragments of broken weapons, and even holsters, are often found upon the heath, but the eagerness of the people to possess a relic of this kind, soon occasions them to be as effectually concealed from future observation, as if they still remained buried in the field of Culloden. We found a very intelligent guide in the peasant we had brought, and I could not avoid thinking, what an excellent subject he would make for an historical painter, as he stood in the middle of a wide heath, leaning upon his spade, over the graves of his countrymen, relating the traditional tales of their valour, tracing out upon the turf the line of the adverse armies, and pointing out the spot where the most celebrated of the different clans were interred. We found in no instance a heap of earth over a single body; the graves, though not large, were all made to contain as many as possible; and in one long trench, which was dug upon that occasion, it is supposed above one hundred persons were buried.

The remarkable remains of a vitrified fort, on the summit of Crag Phadrich, was the next object which called for our notice in the neighbourhood of Inverness. It is exactly of the same nature as that which I discovered at Beregonium. If specimens of either were laid together on a table, it would be impossible to discern one from the other. The pumice-like matter of Beregonium is, however, not found at Crag Phadrich. Something approaching very near to it, of the same nature, but not so highly affected by fire, is mingled with the other matter, but neither altogether so porous nor so light, as that of Beregonium; every other appearance is exactly the same: the stones all lying in a heterogeneous mass, cemented together by the melted matter, which ran from those most easily fused. An accurate and minute description of Crag Phadrich has been given by Mr. Fraser Tytler, in the second volume of the *Edinburgh Philosophical Transactions*.

"The whole of Cawdor castle is peculiarly calculated to impress the mind with a retrospect of past ages, feudal customs, and deeds of darkness. Its iron-grated doors, its ancient tapestry, hanging loosely over secret doors and hidden passages, its winding staircases, its rattling draw-bridge, all conspire to excite the most gloomy imagery in the mind. It was indeed a fertile spot for the writers of our modern romances. The mysteries of Udolpho would vanish in contemplation of the less perspicuous intricacies in the castle of Cawdor. Among these must be mentioned the secret apartment which so effectually concealed Lord Lovat from the sight of his pur-

suers. Never was any thing so artfully contrived. It is impossible for the most discerning eye, without previous information, to discover the place of his retreat. And even after being told that a place of this nature existed in the castle, I doubt whether it could be discovered. It is placed immediately beneath the rafters in one part of the roof of the castle. By means of a ladder you are conducted by the side of one part of a sloping roof into a kind of channel between two ; such as frequently serves to convey rain-water into pipes for a reservoir ; by proceeding along this channel you arrive at the foot of a stone staircase, which leads up one side of the roof to the right, and is so artfully contrived, as to appear a part of the ornaments of the building, when beheld at a distance. At the end of this staircase is a room with a single window near the floor. It is said Lord Lovat used to be conducted to this place when his pursuers approached, the ladder being removed as soon as he ascended. When the search was over, and the inquirers gone, the ladder was replaced, by which means he lived comfortably with the family, and might long have remained secure, if he had not quitted the place of his retreat.

"A remarkable tradition respecting the foundation of this castle is worth notice, because circumstances still remain which plead strongly for its truth. It is said the original proprietor was directed by a dream to load an ass with gold, turn it loose, and, following its footsteps, build a castle wherever the ass rested. In an age when dreams were considered as the immediate oracles of heaven, and their suggestions implicitly attended to, it is natural to suppose, the ass, as tradition relates, received its burden and its liberty. After strolling about from one thistle to another, it arrived at last beneath the branches of a hawthorn tree, where, fatigued with the weight upon its back, it knelt down to rest. The space round the tree was immediately cleared for building, the foundation laid, and a tower erected : but the tree was preserved, and remains at this moment a singular memorial of superstition attended by advantage. The situation of the castle accidentally proved the most favourable that could be chosen ; the country round it is fertile, productive of trees, in a wholesome spot ; and a river, with a clear and rapid current, flows beneath its walls. The trunk of the tree, with the knotty protuberances of its branches, is still shown in a vaulted apartment, at the bottom of the principal tower. Its roots branch out beneath the floor, and its top penetrates through the vaulted arch of stone above, in such a manner, as to make it appear, beyond dispute, that the tree stood as it now does, before the tower was erected.

For ages it has been a custom for guests in the family to assemble round it, and drink, 'Success to the hawthorn,' that is to say, in other words, 'Prosperity to the house of Cawdor!'

The travellers proceeded in their tour through Elgin to Aberdeen; thence to Dundee, Perth, and Stirling. On their way they visited Glamis Castle, which Mr. Clarke thus describes:

"About a mile out of the road near Glames, anciently Glamis, six miles from Forfar, are the venerable remains of Glamis Castle, the property of Lord Strathmore. I do not know a building so calculated to impress the mind with ideas of feudal dignity, and castellated grandeur as this of Glames. A winding avenue of trees conducts you by the side of a noisy rivulet, to its irregular and majestic front. It stands on a noble plain, surrounded by extensive woods and plantations of thick embowering trees. A part of it has been taken down, but sufficient still remains to show its pristine importance. On approaching, the eye is lost in a futile attempt to discover any thing of design or plan in its appearance. A number of small and gloomy windows, with the minute intersected casements, which distinguished the residences of our forefathers, appear without order in various parts of the edifice. High above all rise a number of turrets of a singular conical form. Approaching an enormous portal, thickly embossed with iron studs, we knocked long and loudly for admission, and as we listened to learn if an approaching footstep indicated the residence of any human being, the wind roared loudly over the battlements, and whistling among the interstices of its walls, was heard at a distance like the faint screams of persons in distress. A clanking of iron was heard upon the stone staircase within, like the fetters of some person descending in chains towards the door; and the impressions made by so extraordinary a noise, were not weakened by hearing the creaking of an enormous iron grate, opening on the inside. At the same instant a small door of about a foot square, formed in the middle of the outer portal, was opened by a female figure, with long black hair, bare feet, and a large bunch of keys, who demanded our business.

"To see the castle, I replied. 'All the castle?' again rejoined the same figure, 'or only the room where the murder was committed?'

"I know of no murder committed in this castle, said I, but wish to see as much of it as you are willing to show.

"The door was then opened, and we followed our conductress up a winding stone staircase, to an old chamber in which stood a bed of uncommon magnificence, though at present in a very tattered condition. It was of rich crimson velvet, and straw-coloured satin, on which had been wrought a beautiful embroidery of flowers in gold. In this room we were told, that a murder had formerly been committed by some hired assassins, who were conducted to their victim by a servant they had bribed. But who that victim was, or when the pretended murder was committed, or at whose instigation, or for what purpose, we could never discover.

"In the principal bed-chamber of the castle, over the chimney-piece, is a painting of uncommon merit; whether an original or a copy I am not decided. To use the technical term of an artist, it had much of that *fatness* in the colouring which is supposed to mark the free touch of an original painter, but at the same time there were parts in the drapery, which appeared to be laboured. The subject represents our Saviour paying the tribute-money. It consists of seven figures, half-lengths, according to life. The disposal of these figures, the fore-shortening of a venerable countenance, peeping over our Saviour's left arm, and the happy distribution of shadow throughout the whole, are admirable. If the painter has failed in any thing, it is in the portrait of our Saviour, which forms the principal figure in the piece."

Mr. Clarke thus expresses himself, respecting the beauty of the country, on approaching Dunkeld:

"Nothing occurs particularly remarkable, until just before you arrive at the toll-gate, before descending into the beautiful vale of Tay; and from that moment, a scene opens before you, which perhaps has not its parallel in Europe. I know not in all Scotland, nor in any part of Great Britain, a scene more striking than Dunkeld, as you descend to cross the ferry. From the toll-gate towards the river, you have the great forest of Birnam above you on the left, and down far to the right, a long hollow valley, watered by the rapid meandering Tay, attracts the attention. Dunkeld, shut in by high mountains, rises with its ruined cathedral, its church and houses, above the water. To enrich this noble scene, the finest trees are seen flourishing with the greatest redundancy. How weak and groundless are the aspersions of Johnson, respecting Scotland and its timber, when one beholds this luxuriant valley, proudly decorated with majestic oaks, sycamore, limes, beech,

maple, birch, and all the glories of the forest. I measured a single oak close to the ferry, and found it to be seventeen feet in the girth, and near it stood a sycamore of much greater magnitude.

"The grounds belonging to the Duke of Athol, I do not hesitate to pronounce to be almost without a rival. There are some scenes about them, which bear a resemblance to the finest parts of Mount Edgumbe in Cornwall. The walks alone form an extent of sixteen or seventeen miles, and these are kept in the finest order; not fantastically cut according to any absurd rule, which may violate the grandeur of nature; but winding among the most solemn groves, and majestic trees, which the earth produces. I cannot pretend to detail its beauties. The pencil alone can, and even that would but inadequately describe them.

"The greatest curiosity of Dunkeld, at least that which is generally esteemed such, is the cascade, formed by a fall of the Bran, about half a mile from the ferry of Inverness. The manner in which this is presented to the spectator, has been much reprobated by several of our modern tourists, who, anxious to show their taste for the beauties of nature, hastily condemn the smallest interference of art. For my own part, I entirely differ with them respecting the cataract of the Bran at Ossian's hall. I consider it as one of the most ingenious and pleasing ornaments to rural scenery I ever beheld. A hermitage, or summer house, is placed forty feet above the bottom of the fall, and constructed in such a manner that the spectator in approaching the cascade, is entirely ignorant of his vicinity to it, being concealed by the walls of this edifice. Upon entering the building, you are struck with a painting of Ossian, playing upon his harp, and singing the songs of other times. The picture, as you contemplate it, suddenly disappears with a loud noise, and the whole cataract foams at once before you, reflected in several mirrors, and roaring with the noise of thunder. It is hardly possible to conceive a spectacle more striking. If it be objected that machinery contrivance of this sort wears too much the appearance of scenic representation, I should reply, that as scenic representation I admire it, and as the finest specimen of that species of exhibition; which, doubtless, without the aid of such a deception, would have been destitute of half the effect it is now calculated to produce. A little below this edifice, a simple but pleasing arch is thrown across the narrow chasm of the rocks through which the river flows with vast rapidity. About a mile higher up the Bran is the Rumbling Bridge, thrown across a chasm of granite, about fifteen feet wide. The bed of the river, for several hundred

feet above the arch, is copiously charged with massive fragments of rock, over which the river foams and roars like the waters at Ivy Bridge, in Devonshire. Approaching the bridge, it precipitates itself with great fury through the chasm, casting a thick cloud of spray, or vapour, high above the bridge, and agitating by its fury even the prodigious masses which form the surrounding rocks.

"Few objects will more amply repay the traveller for the trouble of visiting them, than the woody precipices, the long, winding, shady groves, the ruins and cataracts of Dunkeld."

The travellers arrived at Edinburgh on the 8th of September, and stayed there till the 20th. Thence setting off for England, they visited the Cumberland lakes, which appeared to disadvantage after the bolder scenery with which they had lately been familiar. Mr. Clarke thus expresses himself, in his journal, respecting the lakes and mountains of the north of England :

"We approached Saddle Back and Skiddaw from an open country ; those mountains looked very contemptible after the Scotch hills. I could hardly believe I saw Skiddaw when it was pointed out. A lady might ride on horseback to the top. We saw distinctly the summit, with a pile of stones upon it. It is covered with verdure, and looks more like the South Downs, than a mountain so famous.

"Nothing remarkably beautiful or striking occurred till we ascended a hill, and the vale of Keswick opened before us, with the lakes of Derwentwater and Bassenthwaite—a scene uniting grandeur with beauty, wild mountains with lakes, and cultivated fields smiling in harvest, and full of trees. The accounts of the lakes are much exaggerated. Loch Lomond surpasses any of them. Derwentwater, from Crow park, compared to Loch Lomond, looks like a pond. When you are on it, or wandering upon its shores, and among its creeks, it is certainly very beautiful. The fact is, the mountains round it, from the vastness of their dimensions, diminish the appearance of the lake itself. On Skiddaw are no abrupt precipices or broken rocks ; its sides are sloping, green, and uniform ; and have all the insipidity of a lawn. Mrs. Radcliffe's account of her ascent is truly ridiculous.

"The appearance of the mountains in Borrowdale deserves all the notice that has been given them ; they are truly

great; in the first style of mountain sublimity. I wished much to have penetrated the pass, which winds among them. The road from Keswick to Ambleside, by the Grasmere Lake, is equal to many of the finest scenes in Switzerland. But no lake is equal to that of Lucerne. Ambleside is a little straggling place, neat, and entirely supported by the swarms which throng annually to the lakes.

"I hardly know what to say of the appearance of Windermere as we left Ambleside. It is certainly unique; but not equal to Loch Lomond; neither can they fairly be compared together. The beautiful appearance of the trees and cultivated fields, full of yellow harvest, is unknown at Loch Lomond.

"Windermere is the most pleasing of all the lakes. I would make this distinction between Windermere and Loch Lomond. They are both sublime; but characterized by different sources of sublimity. The sublimity of Loch Lomond results from vastness, grandeur, and terror: that of Windermere from magnificence alone. And I think this a more accurate description of those lakes than to say Windermere is beautiful, and Loch Lomond sublime; though certainly in Windermere there is more of beauty than sublimity; and in Loch Lomond more of sublimity than beauty."

Mr. Paget and Mr. Clarke concluded their tour on the 26th of September, by arriving at Plasnewydd in Anglesey, the seat of Lord Uxbridge.

CHAPTER V.

Residence at Cambridge—Engagement with Mr. Cripps—Commencement of his Grand Tour—Hamburg—Denmark—Sweden—Lapland—Norway—Finland.

WITH the journey which was the subject of the last chapter, the connexion of Mr. Clarke with his young friend, as tutor, was terminated; but having been formed at a moment when their minds were softened by a common calamity, and continued under circumstances of perpetual novelty and interest, the impressions left by it were unusually strong and lasting; and upon it was laid the foundation of a mutual attachment highly gratifying to both, but reflecting particular credit upon the character of the pupil. That the warmth of Mr. Clarke's heart, the kindness of his manners, and his eagerness both in

acquiring and communicating knowledge, should have secured a temporary hold of the affections of a young and ardent mind, is nothing more than might have been expected, and what in fact did happen in more cases than in this; but in the spirit and constancy of an attachment, which neither the lapse of more than twenty years, nor the wide difference of their pursuits and situations in the world, nor the pleasures of a fashionable life, nor the business of a public one, could ever weaken, there is something as admirable as it is rare. So long as Mr. Clarke lived, the interest and the exertions of his pupil were always ready to be employed in the furtherance of any object which he had at heart; and when that event occurred which is too often found to acquit all worldly obligations and to dissolve all common ties, it only served to bring his friendship forward in a more striking point of view. In every mark, whether of public or of private respect, paid to the memory of his friend, Mr. Paget was always among the foremost; and the readiness with which he entered into all the details connected with the comfort of the family of Mr. Clarke, and the warmth of his exertions in the promotion of every measure recommended in their behalf—exertions not less successful than they were extensive—were such as could only have been expected from a very near relation, or from one who had lived in daily habits of intimacy with him, to the last moment of his life.

Upon their return from Scotland, Mr. Paget was sent to Oxford according to his destination, and Mr. Clarke returned to Uckfield, where, towards the end of the winter, the author of this Memoir went, in conformity to a long promise, to spend a few weeks with him. He had been living with his family ever since his return, and it was reasonable to expect that the arrangement and digestion of the materials of a journey, in which he had taken so much interest, while the objects were fresh in his recollection, would have been his principal employment and resource; especially as it was always his intention to publish them; but he had dismissed this subject from his thoughts, and, to confess the truth, was wholly absorbed in the occupations and amusements of an active country gentleman; among which shooting was the most prominent. For the more effectual prosecution of this object, he had procured from the Duke of Dorset, the deputation of several large woods and manors in the neighbourhood of Uckfield, in which it was his daily habit to expatiate, and with as much enthusiasm and delight as the keenest sportsman of his time. He was not successful indeed, nor was success necessary to his enjoyment; it was the wildness of the sport, and the bustle and activity of the exercise which captivated him; and as he was then with—

out any definite objects in life, it became a matter of painful conjecture to those who regarded him, when and how the indulgence of such a passion might cease. On this account all the influence of his friend was exerted to withdraw him altogether from this scene of fruitless labour (for such it was to him on many accounts,) and to induce him to take up his residence in Cambridge, where he would be certain of finding pursuits worthy of his ambition, and friends disposed to partake of them. But this was a more difficult undertaking than might have been imagined. The repugnance he at all times felt to remove from his mother's house, had lately been considerably strengthened by a sense of something like independence which his election to a Fellowship* had created, and what was more unfortunate, by an unaccountable dislike to the very place where he was urged to go; and it is very probable, that every remonstrance, and every effort of his friend would have been unavailing, if they had not been happily seconded by an accidental circumstance, which occurred most seasonably to aid them. His name was put down at Uckfield for the supplementary militia, and such was his dread of being compelled to serve in this corps, that without stopping to inquire by what other means he might escape the chance of the impending evil, he immediately seized upon the idea of College, as of a place of refuge from it. "My going to College for a short time," he says in a letter to his friend, soon after the latter's return to Cambridge, "I am afraid, will now be absolutely necessary, for they have entered my name to be ballotted for as a supplementary militia-man. Tell the Master I will be bursar, or shoe-black, or gip, to avoid marching among a mob of undrilled recruits. Only fancy, Captain Clarke, or, what is worse, Ensign Clarke, of the awkward squad. I am very sure you would soon find the addition of — brought to a court martial for disobedience of orders. Seriously I will beg of you to request the Master to appoint me bursar without delay, that I may go to Lewis, and tell the justices I am exempted by a College office, and only there upon a visit." Accordingly he was appointed bursar; and rooms, having been prepared for him at his request, he prepared to take up his residence in College at Easter 1798.

In the mean time, however, an engagement more directly connected with the line of life he had adopted was proposed to him; and as this engagement led afterward to important consequences, and was, in truth, the cause of his undertaking, and

* He was elected Fellow of Jesus College before he went to Scotland.

acquiring and communicating knowledge, a temporary hold of the affection is nothing more than might have happened in more and constancy of an attachment than twenty years, in situations in the world nor the business something as a lived, the intention to be employed at heart; found to monition more lic P

erated journey to the of it more fully. The man of his own neighbourhood lately succeeded to a conscription of Mr. Clarke for three hope of supplying the defects of those means, which though late, were In the pursuit of this advantage, the secondary importance to him, and he was easily Clarke's recommendation, to admit himself a of Jesus College, and to accompany his knowledge; with an understanding, which was equally both, that after a certain time spent in preparatory should undertake some journey to the Continent The pecuniary part of the proposal was very liberal, the plan was entered upon without delay. With them also to the University a gentleman of a very different character, and in a different situation in life; led there acted partly by the same motives as those which influenced Mr. Cripps, a love of Mr. Clarke's society, and a desire of profiting by his information, and, in this respect, affording a remarkable instance among many which might be quoted of the strong attachments inspired by Mr. Clarke; but chiefly induced by another reason, which, considering his circumstances, will be regarded as very rare. This was the Honourable John Tulton, an elder brother of his first pupil, the same who had accompanied him as far as Brussels on his tour to the Continent. He had lived a considerable time in the fashionable world, had partaken largely of its interests and its pleasures, and at the time of his admission to Jesus College, was in the full enjoyment of all that men usually desire, being splendidly allied, a Member of Parliament, and possessed of a larger fortune than he could spend. In all this, however, he had not found what would satisfy his understanding and his wishes, and one object of his coming to College was to try, whether the pleasure of academic pursuits and the society of literary men would prove more effectual. The experiment, however, was unhappily of short duration: his health, which was indifferent when he came, declined rapidly after his admission, and compelled him frequently to remove to town for advice: and before eighteen months had expired, he fell a victim to a species of atrophy, under which he had long laboured.

During the next twelvemonth, Mr. Clarke resided constantly with his pupil at Jesus College, and thus commenced a new and important era in his life, in many respects highly beneficial

to him. Hitherto his studies had been desultory and irregular, dependent upon the situations into which he was thrown, and the tastes and sympathies of the persons with whom he lived, and otherwise pursued under many and striking disadvantages; but now he enjoyed the inestimable benefit of being master of his own pursuits, and of a considerable portion of his own time, under circumstances most favourable to the cultivation of them. Accordingly, notwithstanding his employment with his pupil and his College office, he contrived to attend constantly the chemical lectures, and to improve himself in several other species of information essential to his future views; and what was more important, he began to establish in his general reading a certain degree of regularity and method, to which he had hitherto been a stranger. But to the society of the place, he was unquestionably indebted for the most decided advantage. Formerly he had lived either with young men of family who looked up to him for their opinions; or with persons whose age and situation placed them beyond the reach of competition; but now his mind was brought into daily and familiar contact with those of many able scholars, of the same rank and standing with himself, and engaged in a similar career—men, for the most part, of more regular understandings, and more mature judgment than his own—from whose conversation he could not fail, among other improvements, of making some progress in a species of knowledge, oftener forced upon us than sought, but valuable however obtained, that of himself. It must be confessed, however, that at this period his residence in Cambridge was not productive of all the satisfaction to himself, which his friends had so confidently promised. There was something in the tone and habits of the place, by no means calculated to do away the prejudice he brought there: it was neither the varied gayety of the world, nor the unclouded serenity of home; but a scene different from both, for which his former life not less than his natural disposition rendered him unfit, without some previous experience and discipline. Beyond all this, the love of travel still showed itself to be the ruling passion of his mind, and was constantly urging him towards the means of fresh gratification. Thus, notwithstanding the many sources of advantage and enjoyment with which he was surrounded, he was never less disposed to be at ease in the whole course of his life, and if they who knew him best were desired to point out that period of his history, in which he appeared least amiable to others (and it is only of the degree of which there can be any question,) it would certainly be this year of his residence in Cambridge. On these accounts he often urged upon the author of this memoir, at that

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the senior tutor of the College, the immediate execution of a scheme they had long had in contemplation of going abroad together. In the summer he always found a willing auditory, and as the north of Europe, it was determined, after having been proposed and rejected, that they should visit Sweden, with as much of Russia besides, as could be comprehended within the extended limits of a long vacation. Mr. Cripps, his pupil, was of course of the party from the beginning, and with it was afterward associated a gentleman, since highly distinguished in the literary world, Professor Maltus. He was at that time Fellow of the College, and having been occasionally resident during this year, and often present at the discussions to which the scheme had given birth, was easily persuaded to embark in an expedition, which, besides the many obvious inducements it held out to him in common with the rest, afforded a prospect of information peculiarly desirable to himself. He had lately published his first work, an octavo volume, upon the Principle of Population; and although it was quite impossible for him to anticipate the deep and extensive interest, which the peculiar circumstances of the country have since given to the subject, it is certain that he was at that time exceedingly impressed with the practical evils to which the prevailing errors respecting population had given rise, and not less firm in the truth of his own conclusions, than sanguine as to their ultimate establishment. But being certain that a theory so adverse to all the rooted prejudices and received opinions of mankind, was not likely to make its way by argument alone, however logically supported, he was anxious for the sake of truth as well as of public happiness to collect from every quarter of the habitable world all the prominent facts which could fairly be supposed to bear upon the question. In this inquiry the countries northward of the Baltic were for many reasons likely to be of importance; but they were precisely those in which the state of society was less known, and the details required less likely to be obtained from native authors, and on this account he was glad of the opportunity now afforded to procure, by actual observation and inquiry, the materials of which he was in search. To this tour, therefore, the public are indebted for all that curious statistical information respecting Norway and Sweden, with which his quarto volume is enriched, and for many of those facts and documents by which the truth of his former demonstration is so triumphantly supported and confirmed.

But to return to Mr. Clarke. The party set out from Cam-

bridge at the time appointed, the 20th of May, 1799 ; and the journey, which was at first intended to occupy only six or seven months, was continued by himself and his pupil for more than three years and a half, having been concluded in the latter end of November, 1802. During this period, the series of letters next presented to the reader was addressed to his friends at home. They will form, it is presumed, by far the most amusing as well as the most instructive portion of the present work ; and on this account they will be inserted with as little alteration and curtailment as possible ; but as they were composed under a variety of circumstances, and possess very different degrees of merit, the following observations upon their character and contents may possibly assist the reader's judgment respecting them.

As Mr. Clarke never failed to write to some one or other of his friends from every remarkable spot which he visited, and as very few of his letters have been lost, they will be found collectively to furnish a succinct and faithful narrative of that long and eventful journey, the enlarged details of which have occupied no less than six volumes quarto, and have mainly contributed to spread the reputation of the author throughout every part of Europe. In this point of view they cannot fail of being highly interesting to a large class of readers, who, having wanted either the time or the opportunity to make themselves masters of so voluminous a work, will be delighted in this summary, but interesting way to reap the benefit of his researches. But it may be farther affirmed, that these letters are not less valuable when considered separately, than when regarded in connexion with each other ; for besides the raciness and freshness they possess in common with all other information conveyed under similar circumstances, having been written while the objects were still warm in his recollection, or actually in his sight ; they have the peculiar advantage of exhibiting in a striking point of view, that stream of colloquial eloquence in which the goodness of his heart was most apparent, and the playfulness, the vivacity, and the force of his imagination had their fairest and freest scope. Of all the species of writing which he essayed, the epistolary was the most becoming to him ; and as the letters now exhibit in a narrower field the qualities which accompanied him when he spoke, no one who reads them with attention will be at a loss to discover what his conversation once was—the same ease, lightness, and spirit—the same distinct view of his own character and thoughts—an expression still more graceful and flowing—with a talent for description, and a taste in the selection of his topics, which have rarely been surpassed. To be natural

indeed could scarcely be called a virtue in him ; for his conceptions were so rapid, and struggled so much for utterance, that they could scarcely at any time be controlled.

But if the form of these communications may be supposed to give them an air of novelty, even with those to whom the travels are familiar, may it not be said with truth, that much of the matter will be new to them too ?—They constituted no part of the materials from which the great work was constructed. Many of the facts stated in them are entirely different from those of his journal : while others, which are the same, are still presented in different lights ; and in one large class of thoughts originating in the prolific source of his own susceptible and vivid feelings, which the various objects and incidents of the journey could not fail of calling out, the advantage is almost peculiar to the letters : for, however natural it may be that such topics should occur in a species of composition, in which it is permitted, nay expected, that a man should speak frequently of himself, they could not appear with so much advantage in a grave and didactic work, expressly and elaborately written for the public eye. Remarkable specimens of this kind of merit will be found in the letters from Ida and Parnassus, and particularly in that from Jerusalem, which will probably be considered as one of the happiest effusions of his pen. It is curious to contrast the exaltation of his mind upon his arrival at the Holy Land, with that sobriety of spirit which characterizes his subsequent description of it. The Bible was in his hand, and the book of nature lay open before him, and from these two sources, amid scenes the most sacred to our recollections, and customs scarcely less durable than the rocks and valleys amidst which they are preserved, he has drawn the materials for a succession of pictures, which, in point of faithfulness and effect, may be compared with any that have been presented to us from that country since the days of Holy Writ : while the pious and didactic turn of the images and associations with which they are filled up, give to the whole a calm and impressive character, which is not less appropriate than it is pleasing and instructive. It is impossible for a well-educated man to read this letter without pleasure, or a pious one without edification and improvement. Upon the whole, it may be observed, that the matter of these compositions increases in interest, as he advances in his journey, for a reason which has been already given : nor can it escape the notice of any one that this interest takes a higher character, when the classical scenes of Asia and Greece present themselves to his view.

Having said thus much of the correspondence generally, it will be proper to add a few words respecting the letters ad.

dressed to his mother, which will be found to possess a character of their own. To account fully for this distinction, the reader will be pleased to keep in mind, that the parent to whom they were written was a person of a most kind and affectionate heart, and of a sound and useful understanding, but with no pretensions to learning, and without any decided literary taste : and farther, that when her son left England, she was labouring under a disorder which had long excited the most lively apprehensions in the minds of her children ; and otherwise placed in circumstances requiring every consolation for his absence, which in truth she did not long survive, and to which nothing could have reconciled her, but the assurance of his welfare and advantage. In this state of things, that he should have been more occupied with her feelings than with his own, whenever he sat down to write to her, and that amid the various topics which occurred to him, he should have selected only those calculated to amuse her, or to be agreeable to her taste, will be no matter of wonder to his early friends, who know well, that to have excited a cheerful train of thought in her mind, or even a passing smile upon her countenance, would at any time have been in his eyes a greater triumph of his epistolary talents, than the most successful exhibition of his own learning and ability in any other quarter. Accordingly, these letters to her will be found throughout easy, animated, and playful, abounding in cheerful views of things, and droll and peculiar turns of thought, but devoid of all literary and scientific discussions, as being beside his purpose, and abstaining from every painful circumstance affecting his own health or happiness, of which there occurred but too many, as being certain to give her pain, and to add to her anxiety about himself.

It remains now only to say a few words of the pupil, whom his good fortune had allotted to him, from whose character and habits he unquestionably derived the greatest facilities and advantages in the whole conduct of the tour. There are few young men of independent fortune, who would have been disposed to undertake so difficult a journey, and fewer still who would have been able and willing to go through with it. But Mr. Cripps had all the qualities requisite for the companion of such a man, in the prosecution of such an object : a singular attachment and devotion to Mr. Clarke, disposing him at all times to acquiesce cordially in every plan, which the better knowledge and experience of that gentleman suggested—a sweetness of temper, which neither crosses nor privations could ever ruffle—a liberal spirit, ever ready to furnish the means, whenever an opportunity of making an important acquisition occurred, and an ardent desire of information, which

made him at all times as anxious to press forward and to extend the limits of their journey, as Mr. Clarke himself. To these may be added a strong and hardy constitution,* in all the vigour of youth, enabling him to endure, without material inconvenience, those hardships and labours, which Mr. Clarke struggled through by means of his enthusiasm, at the expense of great personal suffering and the permanent injury of his health.

It was at first thought advisable that the letters should tell their own story, without any other aid or explanation than that which may be derived from the map: but a more accurate examination of them has discovered several chasms in the narrative, in which a few words of explanation will be required. Such, therefore, will be given when necessary: but not to interrupt materially the thread of their proceedings, which is so well unfolded by Mr. Clarke himself, it may be proper for the reader to anticipate that the party separated into two, near Lake Wener in Sweden, after having dined together, within a circle of Runic stones between Mounts Hunneberg and Halleberg. Whether Mr. Clarke, having now ascertained the spirit and powers of his pupil, already contemplated a more extensive tour, and therefore had become indifferent to the order of the first, or whether the scenes within the arctic had risen into more importance in his eyes, he determined immediately to proceed to Lapland before the summer should be far advanced; but as this step was quite incompatible with the limited views of the other travellers, they adhered to the original arrangement, and passing through Udevalla, entered Norway at Fredericshall.

To his Mother.

“HAMBURG, May 28, 1799.

“My dear Mother.—We arrived here safe on the 25th, after the most expeditious passage, perhaps, ever known. The

* Of what importance this quality was to a companion of Mr. Clarke in his travels at that period of his life, can be known only to those who have been with him upon such occasions. There was at times a feverish impatience about him, which would never allow him to place his own rest or comfort in competition with the more rapid attainment of any object he had in view, nor even to tolerate such a disposition in others. The friend who writes this memoir, sometimes experienced this to his cost; and Mr. Clarke himself confesses, in one of his letters, that in their journey from Lake Wener to Tornéa, which, including their stay at Stockholm, occupied about eighteen days, they were never in bed more than four hours out of forty-eight. The consequence of which was, that he was compelled to prosecute his journey to the north of the arctic circle, under the effects of a severe disorder, brought on entirely by this imprudent haste.

captain assured us, that during forty years, he had never reached Hamburg on the third day. Read and determine ! We sailed on Thursday at noon. On Friday, at midnight, we passed Helgoland. On Saturday, at half-past six in the morning, we entered the Elbe. At half-past ten we arrived at Cuxhaven. Finding a vessel bound for Hamburg, the wind fair, at eleven we started again ; and as the sun was setting, at eight in the evening, after a most delightful voyage, we landed in Hamburg. What think you now of our flight ? At Cambridge, on the 20th ; at Hamburg, on the 25th.

"We had few alarms in the passage. Rather a stout gale, as you may suppose by our progress ; but not more than the sailors desired. Twice we received signals to hoist our colours ; and once we were boarded by the crew of an English hired armed cutter. Otter suffered most in the voyage. Malthus bore it better than any one. Cripps made a good seaman, being always upon deck.

"There are two things which the English expect to receive from Hamburg, viz. news, and hung-beef. The hung-beef I shall keep for our own use among the mountains : the news you are welcome to ; and I assure you it is very considerable. Turin is in the hands of the Allies. Naples is taken, &c.

"Hamburg is a place of much higher importance than I had imagined. Her merchants are princes, and their coffers the emporium of the riches of the world. I can buy all sorts of India goods, cambric, Holland, &c. free from any duty.—

"We go next to Copenhagen, and from thence along the western side of Sweden, into Norway, to Christiania. We shall then proceed northward as near to the pole as possible. I intend to pass within the arctic, at all events ; that for once I may see the sun revolve for twenty-four hours, without setting ; and learn what sort of a Rump Parliament they hold in Lapland. We then pass round the north part of the gulf of Bothnia, and afterward cross over to Stockholm and Upsal. Then we visit Finland, and proceed to Petersburg ; after which, having letters to Domingo Gonzalez, we embark for the moon. Love to all ! God bless you !"

To the same.

COPENHAGEN, JUNE 7, 1799.

"You are not to be in the least alarmed, if you do not hear regularly from me ; because our route lies through countries,

where the post is always irregular, and often where there is no post whatever.

"We are at this moment arrived here. I write under great fatigue, and in that hurry which must attend a traveller, with many other things to think of, and on the top of a trunk. We had a pleasant journey from Hamburgh, where we spent a week. A fierce republican, à la Jacobin, came and smoked a pipe with me, to know how matters went on in England. We are all well, and very happy. I have not had above four hours sleep these seven nights past; but never was better in my life."

To the same.

COPENHAGEN, June 10, 1798.

"We long to hear news from England, and to know how you are all going on. I cannot hear from you till I arrive at Stockholm, which is a sad grievance, as our tour to the north takes place before we descend upon that city. Lord R. Fitzgerald, the English ambassador, has been very civil to us. Our party dined with him yesterday. I sent my apology, and staid at home, to recover the arrears in my journal, and to settle the account of expenses; which last is very complicate; owing to the confusion arising from money of so many sorts and denominations.

"Pray write word of all that happens. Every little thing relating to England is interesting here. Send all your letters to Stockholm. There has been a report that Lord St. Vincent has beaten the French fleet. I fear it cannot be true.

"On Friday next, there will be a grand review of ten thousand Danish troops, at which the King and the Prince will appear. We wait to see that, and then depart for Sweden. Copenhagen rises like a Phoenix from her ashes. She has twice been destroyed by fire. At this moment before my eyes, are the ruins of the finest palace in the world. It was burned down about three years ago. You may remember reading an account of the catastrophe in the papers. Every thing was destroyed. A collection of pictures, that cost many years, and much treasure, to complete; books, furniture, plate, and so on.

"I suppose you have traced our route. We came from Hamburgh to Lubeck, Kiel, Eckrenforde, Flensborg, Apenrade, Hadersleben, Assens (in the Isle of Funen,) Odensee, Nyeborg, Corsoer (in Zealand,) Slagelsø Roeskilde, and

Copenhagen. Now I will give you our route from this place, till we get to Stockholm. From Copenhagen to Elsinour, thence to Gothéborg and Christiania. Then through Norway into Lapland, and descend southward, to the north of the Gulf of Bothnia. Then down the western coast of the Gulf, to Stockholm. Then cross the Gulf, to Finland, and through Finland, to Petersburg."

To the same.

"GOTHÉBORG, in SWEDEN, June 18, 1799.

"After a journey of one hundred and twenty miles, without sleep, and almost without food, I sit down to write to you. Out of the one hundred and twenty, sixteen were performed on foot, and the rest in wagons, over Swedish wilds. All this you know is play to me; only it may prevent my writing regularly. And I must beg of you never to be surprised at not hearing from me. Two months may elapse, and a letter not reach you. I shall of course always write when I can.

"Sweden is not so mountainous, nor with so foreign an aspect as you would imagine; so far as we have yet explored it. The roads are better than in England; but we travel in wagons, sitting on a bare plank, without springs, or any thing to put our feet upon, over a wild and desolate country: chiefly characterized by extensive heaths, uncultivated commons, or barren rocks. We may fairly say we are shaken to death; but it is death unto life; for I never was better in my days, nor ever so completely enjoyed myself. The party seem all of the same mind, and are resolved to attack the pole.—The little désagrémens we meet with are the stimulants to new exertion; they constitute the zest of enterprise, the salt of intellectual food. Before the middle of July, I hope to stand within the arctic circle.—

"To-morrow we leave this place to visit the cataracts of Trollætta, and the Wener Lake. To-day we dine with a Swedish family. We have above fifty letters of recommendation to the north, not including those of Otter and Malthus."

To the same.

"WENERSBORG, SWEDEN, June 21, 1799.

"Now you will have no difficulty to find me in the map of Sweden. Open it this instant, and behold me upon the great

Lake of Wener, or Wener See, in Westro Gothland. I am now dripping from its waves; having bathed in its crystal waters. There! you have the map open! Well! don't you see me? How do you do? I perceive you have your spectacles on. What a lake! It is one of the largest in the world. One hundred miles in length, and fifty in breadth. Come, will you take a boat with me? I will row you across to some of the islands. There, sit down at the stern. Ay, that is right—take care you don't wet your petticoats.

"This is a land of iron; therefore, to be in character, I write to you with my old iron pen. We are all very well and very happy. I shall present your compliments to the King of Sweden, and ask him, if he will eat his beef pudding with you in the autumn, and belong to our whist club, at Mrs. Budd's. —I have prepared my speech upon the occasion.

"I have somewhat altered my route, and mean to go straight from hence to Stockholm; where I shall be in four days; so, I shall get any letters from England, at least six weeks sooner. From Stockholm we proceed to the north of the Gulf of Bothnia into Lapland, and through Lapland into the north of Norway, and then, steering south, we return to Sweden again, before we set out for St. Petersburg."

From Wenersborg Mr. Clarke and Mr. Cripps proceeded rapidly by the direct route to Stockholm, where they stayed only a few days to procure money, and to purchase a light wagon for their northern journey. Thence they immediately took their way through Upsal, and along the shore of the Gulf of Bothnia to Torneá; at which place they arrived on the eighth of July. During this interval Mr. Clarke wrote no letters.

To the Rev. Robt. Tyrwhit, Jesus College, Cambridge.

"TORNEA, Gulf of Bothnia, 66 deg. N. Lat.
July 9, 1799.

"My dear Sir,—I have promised to write to Satterthwaite, and many others; but as at this time of the year, I know no person so likely to be in college as yourself, you will, I hope, excuse my troubling you with this. I will beg of you to show

it to any friend who may be interested in the success of our enterprise.

"I wished to write from Upsal; but really every moment is so precious, that I was not able. It is now eleven at night, and the sun shines upon this paper. We hope to see him all night above the horizon, when we get farther to the north; but I fear we are too late. He sinks for about an hour and a half below the horizon; but we have no other difference between noon and midnight, than that the thermometer during the former is at 75, and during the latter at 46. Our fatigue has lately been excessive: but we are in excellent health. We have now traversed the whole of Sweden; having completed a journey of near two thousand miles to this place.

"Otter and Malthus left us at the Wener Lake. Our parting was very painful, but we shall soon meet again. They found it necessary to give up part of their journey, that they might not trespass on their time, as limited at setting out. It appeared also, that they were somewhat daunted by the account they received of an expedition so far to the north. Malthus thought I should never be able to effect a passage by land, from Lapland to Norway. They went into the south of Norway. We came to Stockholm, Upsal, and through the towns on the western coast of the Gulf of Bothnia to this place. Our expedition has succeeded beyond our most sanguine expectations; as you will in some measure learn by the date. We travel in a little wagon. From the Wener Lake to Stockholm, we passed in carts, without springs, in no degree better than an English dung-cart. The joy I feel in the prospect of visiting the countries within the arctic is not to be expressed. It is my intention to go from hence to Enontakis, in Tornea Lapmark, and from thence to North Cape, to visit the coast of the icy sea. If I find it impracticable to pass to Drontheim, from thence, by water, I shall return, and cross the Pitea Lapmark; from whence I can proceed into the north of Norway; visiting various interesting scenes. If we do not meet Otter and Malthus in the north of Norway, we shall find them afterward at Stockholm. Had they been lads of sufficient enterprise, I still think, they might have undertaken a journey full as extensive as ours, with very little addition of time or expense. It is not certain, that I shall not be at Drontheim, even now, before they arrive. I intend to launch a balloon at the capital of Tornea Lapmark; in order to attract the natives together. All the materials are ready. The north of Sweden is the finest country in Europe. Italy and Switzerland may boast of higher mountains and bolder scenes; but the magnificence of


its forests, the beauty of its lakes and islands, and the honesty and the hospitality of its inhabitants are unequalled.


"Would any Englishman expect to find here a good supper, and a post office? We have had our tea, and a game at romps with some Lapland lasses. I am preparing to have a dance with them. Their faces are smeared with bear's grease; and they come as near to the human as any animal, except the natives of Owwhyhee.

"Having conquered all the bugbears, I am disposed to be more facetious than is consistent with the dignity of a letter from the arctic, impregnated with the electric rays of the Aurora Borealis, and which, beyond all doubt, will shine in the dark. But, listen to the nonsense one hears—'What get to Torneá?' exclaimed a multitude, 'you may as well think of getting to the moon!' Yet, here we are, without a single accident; and I may almost add, without a single shower; which has proved very agreeable to passengers in a wagon. I do not intend to turn back until I have scented the polar air. I never was in better health. It is true there is no part of my body I can call my own, except (*grace au ciel!*) my right hand, and left eye. My left arm is possessed by the *Furia Infernalis*. Various venomous insects occupy my body externally. Internally, a commotion owes its origin to sour milk and rye bread. But all these losses render me lighter, and more fit for enterprise.

"Cripps makes an excellent traveller. He is occupied in sending a case of minerals to Stockholm. Mineralogy, botany, manners, politics, astronomy, antiquities, have all found a place in his journal; he seems to grasp at universal science; and works with his hammer among the rocks, like a galley-slave. He particularly desires to be remembered to you. I promised to write to Alderman Newling and to Mr. Outram, of St. John's, the public orator. As I cannot possibly fulfil my engagement, I shall be obliged to you to make those gentlemen acquainted with any particulars respecting our tour, which you may think proper. If there is any article of literature or natural history which you wish to receive from these countries, I beg you will make me your porter. A letter directed, 'à la poste restante, Stockholm,' will reach me any time before the autumn."

To his Mother.

"TORNEÁ, on the most northern point of the Gulf of Bothnia, 66 degrees of North Latitude. July 9, 1799. 

"Would you believe it? In this place to get pen, ink, and paper, and to find a post-office? 'What, get to Torneá?' every 

one said ; yet here I am, and what is more, have not done yet, for I will not turn back, until I smell the Polar air. How happy I am ! Can I believe it ?—am I dreaming ? pinch my nose ! To tread within the arctic !—only fancy ! And to get here without a single accident—not even a soaking.

“ Long letters you cannot expect from travellers, who have slept only four hours in forty-eight for the last fortnight. Would you like a slice of an arctic ham ? It was taken from the thigh of a fat bear. I do assure you, it beats the Surrey hams, out and out. None of your sneers at the Laplanders ! They come as near the human as any animal, except Dame Osborne, and the folks at the alms-house.

“ We have seen Stockholm and Upsal, and came along the western coast of the Gulf of Bothnia to this dear place. And what would you have ? Look at our supper—a bare-footed Laplander is placing it on the table. A tureen of chocolate milk, some very nice rusks, pickled salmon, and pancakes ! If a votary of enterprise cannot feast there, let him starve !

“ We enter Norway next. You must never be alarmed at not hearing from me. It is quite uncertain when you will get another letter, but certainly not before I reach Drontheim ; which will be in the middle, or towards the end of August, then you must allow time for it to get to England.”

To Mr. R. Malthus.

“TORNEA, July 9, 1799.

“ We should have been here on the 7th, if we had not waited a day for Baron Hermelin, and a day with Dr. Nøezen, at Umea. From the moment we parted with you, we may date the beautiful scenes of Sweden. But from Upsal to this place, nothing in Europe can surpass it. You may imagine what my surprise has been, who expected to pass an insipid, barren, flat, maritime territory. Peter is still with us. We have procured our Lapland interpreter, and are setting off for the pole. I do not intend to turn back till I have dipped in the icy sea. I find we can penetrate into Finmark, through Lapland, and to the North Cape, through Finmark.

“ We should have been at Drontheim long before you, if we had not extended our tour. There are as many passages into Norway, as rivers flowing from it. We might pass, 1st, from Hernosand to Rorås, by Gustavsberg ; 2d, from Pitea to Nasa Fjal ; 3d, from Lulea to Quicjock ; and, 4th, from Torneá to

Torneå Trask. This last we shall make ; but shall not go from the icy sea to Tronheim ; but return by Nasa Fjal, through the lakes and mountains of Pitea Lapmark. Afterwards we go from Sheleftea to Hernosand, and then by Gustavsberg to Tronheim, in order to visit the mines and interesting scenes in that passage.

“My balloon is ready, and will be launched in the capital of Lapland. The priests are to give notice in the churches, that all may come to see the Englishman, and his wonder of wonders!!!

“We have many rare plants ; but never since, have once seen that beautiful plant I gave Otter at Hunneberg. Pray let him take care of it, and it shall be painted.

Dianthus Superbus,
 Rubus Arcticus,
 Rubus Chamæmorus,
 Epilobium Montanum,
 Linnaea Borealis,
 Comarum Palustre ;

“These are fine plants ; but we have fifty more, and in Lapland, they say, are the rarest plants in the world.”

From Torneå they proceeded northward, principally by water, up the Torneå and Muonio rivers, with an intention of penetrating to the North Cape. During the greater part of this journey, however, Mr. Clarke was exceedingly ill, and generally compelled to lie at the bottom of the boat, exposed to great changes of temperature, and suffering dreadfully from the mosquitoes. Of this illness, which, combined with the lateness of the season, was the cause of their turning southward from Enontakis, he says nothing to his mother, for the reason already stated. He appears to have owed his cure principally to the fruit of the *Rubus Arcticus* and the *Rubus Chamæmorus*.

To his Mother.

“ENONTAKIS, in Lapland, on the frontiers of Finmark, 68° 30' 30", North Lat. In the most northern province of the Swedish Dominions. July 29, 1790.

“We have found the cottage of a priest, in this remote corner of the world, and have been snug with him, a few days—

Yesterday I launched a balloon, eighteen feet in height, which I had made to attract the natives. You may guess their astonishment, when they saw it rise from the earth.

"Is it not famous to be here, within the frigid zone? More than two degrees within the arctic; and nearer to the pole than the most northern shores of Iceland? For a long time, darkness has been a stranger to us. The sun, as yet, passes not below the horizon; but he dips his crimson visage behind a mountain to the north. This mountain we ascended, and had the satisfaction to see him make his curtsy, without setting. At midnight, the priest of this place lights his pipe, during three weeks in the year, by means of a burning-glass, from the sun's rays.

"We have been driving reindeer in sledges. Our intention is to penetrate, if possible, into Finmark, as far as the source of the Alten, which falls into the icy sea. We are now at the source of the Muonio, in Torneá Lapmark. I doubt whether any map you can procure will show you the spot. Perhaps you may find the name of the place, Enontakis. Well, what idea have you of it? Is it not a fine town?—sashed windows, and streets paved and lighted—French theatres—shops—and public buildings? I'll draw up the curtain—now see what it is! A single hut, constructed of the trunks of fir-trees, rudely hewn, with the bark half on, and placed horizontally, one above another; here and there a hole to admit light. And this inhabited by an old priest, and his young wife, and his wife's mother, and a dozen children, and half a dozen dogs, and four pigs, and John, and Cripps, and the two interpreters, and Lazarus, covered with sores, bit by mosquitoes, and as black as a negro. We sleep on reindeer skins, which are the only beds we have had since Torneá.

"We have collected minerals, plants, drawings, and, what is of more importance, manuscript maps of countries unknown, not only to the inhabitants of Sweden, but to all the geographers of Europe. The best maps afford no accurate idea of Lapland. The geography of the north of Europe, and particularly of the countries lying to the north of the Gulf of Bothnia, is entirely undetermined. I am now employed in tracing the topography of the source of the Muonio. We are enabled to confirm the observations of Maupertuis, and the French missionaries respecting the elevation of the pole, and the arctic circle. I shall bring a piece of it home to you, which stuck in my boot, as I stepped into the frigid zone. It will serve as excellent leaven, and be of great use in brewing, a pound of it being sufficient to ferment all the beer in the cellar; merely by being placed in my cabinet.

"The wolves have made such dreadful havoc here, that the rich Laplanders are flying to Norway. One of them, out of a thousand reindeer which he possessed a few years ago, has only forty remaining. Our progress from Torneá has been entirely in canoes, or on foot, three hundred and thirty miles. There are no less than one hundred and seven cataracts between this place and Torneá. We live on reindeer flesh, and the arctic strawberry: which is the only vegetable that has comforted our parched lips and palates, for some time. It grows in such abundance, near all the rivers, that John gathers a pail-full whenever we want them. I am making all possible exertion to preserve some for you. Wheat is almost unknown here. The food of the natives is raw fish, ditto reindeer, and sour milk called pijma. Eggs, that great resource of travellers, we have not. Poultry are never seen. Had I but an English cabbage, I should feast like an alderman."

"TORNEA, August 14, 1799.

"You may imagine the comfort and satisfaction we feel upon our arrival once more in Torneá. We descended the Aunis and Kiemi rivers, through Kiemi Lapmark, and are rejoiced to get a morsel of sweet bread, and to converse again with human beings. We go now into the north of Norway. Write to Christiania."—

After leaving Torneá the second time, the travellers made the circuit of the upper part of the Gulf of Bothnia, and then descended on the eastern side of it, through Ulea to Wasa; from which place they passed the Gulf, in a vessel to Umca, on the western side. Thence they went to Sundsvald, and then took their way directly west, across the mountains of Malmagen, a part of the chain which separates Sweden from Norway, descending into the latter country near the celebrated copper mines of Roraas.

To the same.

SUNDSVALD, North of SWEDEN,
Sept. 10, 1799.

"—We set out for Norway to-morrow. I hope you received my last from the regions of thick-ribbed ice. I shall

be home in November, or the first week in December, at farthest. How painful is it not to know whether you are well or ill, and what is doing at Uckfield. All my thoughts centre there. Could I but see, once more, your handwriting! My dear sister, too, how does she do? And George, is he with you?—tell me all.

“——We came across the Gulf of Bothnia, from Wasa to Umea. The sun has burned my hands and face, until they resemble this ink. I am become a Laplander in visage, dress, and manners. It would frighten a powdered English beau, to see such figures as we are. Only fancy, being compelled to tar our faces, necks, hands, &c. in Lapland, to save us from mosquitoes!

“We know no more of England than if we were in New Holland.—Now for the mountains.”

To the Rev. William Otter, Jesus College, Cambridge.

TRONHEIM, September 23, 1799.

“——What I have suffered since I saw you I will not fill my letter with; it will be enough to say, I have never had two days of health since I set out for Lapland. I had the melancholy task of telling Cripps how to commit my poor carcass to a grave, and to get home. Once I lost my senses; and, but a few days ago, having crossed the Norwegian Alps with great fatigue, I fancied I had a hole in my throat, and fainted with the chimeras of my own disordered imagination. Now, thank God! I am better, as you see, for I can write. All my illness arose from fatigue, and neglect of sleep, and perhaps from the effect of climate on a constitution unarmed to encounter a frigid zone.

“We are to suppose you intended that we should experience a very serious disappointment, when you neglected to leave the promised letter from you in the post-office. If you had known with what anxious impatience we should search for your handwriting, in every post book, you could not have done this. We have ransacked half the houses in the town, in hopes you had at least left us a line; but in vain. Why did you not give us a little information about the people here, and a few hints necessary to be observed in travelling? We find you missed Bergen, yet we know not why. This is remarkable, as you were so many days idle here. Poor Cripps was ready to weep, when the long-expected letter was not found.

“ We penetrated as far as the frontiers of Finmark, traversing the provinces of Torneá, and Kemi Lapmark ; visited the sources of the Muonio and the Aunis, surrounded the whole of the Gulf of Bothnia ; crossed the Alps to Roraas, and came here last night. We are delighted with this place—live in the same room you did, and ask questions of you all the day. What libraries they have here ! And even the arts flourish. I have bought beautiful pictures already. We are to attend the meeting of the Literary Society, and the Clubs—all Jacobins ! I suppose the vast increase of population here interested Malthus ; and even you would be an antiquarian here, in seeing the spot once tenanted by Norwegian kings. I assure you, I never saw such scenery in Europe, as between Hoff and Holtaalen, on the Roraas road. It is neither Alpine, nor Apennine, but Norwegian ; combining the wildness and sublimity of Switzerland, with the groves of Sweden, and the vales of Italy. Of course you collected the rare minerals which are produced by the mine near Hoff ; particularly that singular fossil, the indeterminate crystallization of quartz. Would you not smile to see me in the character of a botanist ? I botanize from morning till night—‘ O quam mutatus ! ’ It is so vastly absurd, you know, to be poking for weeds in a ditch. Were I any longer in doubt, Sweden would make any man a botanist. I have collected all the plants engraved in the *Flora Lapponica*, and many others. I have bought here the *Flora Norwegica*. It is a good work ; but describing the *Rebus Chamæmorus* (to which I owe my life,) he says the English call it Cloud-berries. Did you ever see it in Britain ? Perhaps the bogs of Scotland produce it.

“ Some plants are still in bloom here. The *Ranunculus* will be the last ; as the *Tussilago Farfara* was the first. I collected the *Ranunculus Glacialis* yesterday. Among other affectations, I am ready to dispute with Linnæus, that the *Lichen Coralloides*, and the *Lichen Deformis*, are the same. That the cause of barrenness in the *Rubus Arcticus*, when transplanted, originates in accidental selection. The specimens carried to the south of Europe, were not Hermaphrodites ; but a singular monster common to that genus, which is male alone. How little do botanists know of plants, when they judge of them from local character ! Here is the author of the *Flora Norwegica* describing the *Pedicularis Sceptum Carolinum* ; and he says, ‘ Sæpissime caulis est nudus, foliis tantum radicalibus instructus, haud raro autem præterea etiam folia verticillata habet circa medium posita. ’ The fact is, the variety, if it may be so termed, of the *Pedicularis Scept. Car.* as found here, has little resemblance to the plant in its natural

state. It is a poor, stunted, dwarfish, deformed emigrant, exiled from Lapland; and not possessing more than a family likeness of its parent. The Scept. Car. in Lapland is never seen with a naked stem. It grows almost to the height of a man; the most magnificent of all the arctic flowers, ornamented with foliage in beautiful gradation, diminishing, and proportionate from its root to its blossom. In Norway, it only shows a miserable head, without the body.

"Have you seen the dissertation by Rudbeck on this plant? The best engraving of it, is in the *Flora Lapponica*; but the seed vessel is incorrect. The *Flora Danica* is generally above all, but fails in this.

"I have treasures inestimable—minerals, antiquities, plants, birds, fish, maps, books, insects, drawings, and so on. Of plants I have, I believe, a thousand specimens, many of course, are duplicates; and I hope some of them will supply you, where you have failed. I hope to give some also to Newton, and to Brooke. In all my illness I never deserted my journal, though it grew thin to keep me in countenance.

"The *Gentiana Nivalis*, *Pedicularis Lapponica*, *Andromeda Hypnoides*, *Saxifraga Azoides*, *Comarum Palustre*, *Salix Amygdalina*, *Lychnis Alpina*, *Pedicularis Scept. Car.*, *Dianthus Superbus*—of these, and many others, I have seed. Will they grow in England? The *Rubus Arcticus* I have preserved in spirits, with its leaves and fruit. Of its flowers I have many specimens in my books. I have also the plants peculiar to Sweden; the *Betula Nana* (though found, by the by, here,) *Cratægus Aria*, and others mentioned by Linnæus. Respecting that illustrious man, I have many curious things to speak, and to exhibit. If it had not been for illness, we should have reached North Cape. We beheld, however, Finmark from the mountains, standing on the spot which Linnæus calls the *last angle of the world*, beyond which there is hardly a trace of animal or vegetable life.

"The Laplanders constitute an interesting portion of our acquaintance. When I sit with you again, I will show you their march from Persia to the pole; you shall hear how they have preserved to this hour the customs and the language of the first patriarchs. Why did you not visit them from Roraas? It is only one day's ride from that place to the mountains of Malmagen, on which we found a settlement of Laps, with above a thousand reindeer. One of which we purchased, and brought with us. His horns and hide I preserve for the public library. His flesh, at this moment, smokes on the table; and Cripps is clamorous, lest it should cool before I join with him, in conveying it 'ad inferos.'

"You perhaps recollect what ideas I had formed of a journey along the Gulf of Bothnia. It has nothing of the maritime character. The Gulf is never seen but as inlets, forming the most beautiful lakes, covered with islands, and ornamented with the tallest and most luxuriant groves. Angermanland, of all the Swedish provinces, is the most interesting. It is the Switzerland of the north. Ostero Bothnia is the most fertile. But, estimating Norway from the specimens we have hitherto perceived, it promises to surpass all the north of Europe in grandeur of scenery. Solander lived at Pitea, in Westro Bothnia, and in that neighbourhood I procured the *Flora Suecica* of Linnæus, with his manuscript annotations. Literature is at the lowest ebb in Sweden; I had the utmost difficulty to get a copy of that work. They are ignorant of the only famous author their country ever produced. But the people are better than the Norwegians—more industrious, yet in greater poverty, more virtuous and more hospitable. Did you meet Acerbi in Stockholm? We sent letters by him from Uleaborg.

"Tell Malthus we have regularly estimated the thermometer. We have obtained the height of it here since the year 1762. Mr. Horniman also brings me a curious account of the increase and present state of population; which may be useful to him. I have procured Professor Leem's account of Lapland and Finmark, in Latin. His widow still lives here."

To his Mother.

"BANDELIE, in NORWAY, October 12, 1789.

"As I know I shall not have a moment to myself in Christiania, where we hope to arrive to-morrow, I avail myself of an opportunity to scribble from a little post-house, on the shore of the Hudals lake.

"I have the satisfaction to inform you, that after three passages of the Norwegian Alps, we are both safe and well; with eager and anxious expectation, making all speed to Christiania, to get letters from dear friends, in dear England. I have not seen even your handwriting since we left Stockholm; except in reading over and over the letter you sent me there, till I have it by heart. I shall keep this open, till I have read yours in Christiania. You may guess what my feelings are, till I know you are all well. Every moment is an age.

"You will hardly credit, that at this season of the year, in

this part of Norway, we are still collecting plants in bloom. The harvest is not yet got in. How little do we know of this country in England! Travellers describe it as a region of snow; and even the illustrious Linnæus says, that before the end of August, winter returns, without autumn, in this latitude. We have traversed the whole of Norway, from Tronheim, or Drontheim, as it is erroneously often called in maps, to the south. Do not be vain of your English refinement! Yesterday I left a party of beautiful young ladies, working tambour, at the foot of the Douvre Alps.

"This is the land for mountains. Ossa and Pelion—Gog and Magog! Switzerland must yield the palm to Norway, in beauty and grandeur of scenery. The mountains here may not have equal elevation above the level of the sea; but nothing in Europe can be more sublime. Tronheim is as fine a town as Bath; and its inhabitants not less polite, though much more hospitable.

"We have only to go now to Stockholm and Petersburg, and then, huzza, for old England, once again! I must leave a little room, in case any letter at Christiania requires an answer."

"CHRISTIANIA, October 15.

"What treasures I have found here! No less than four letters from Uckfield; three from you, and one from Anne. I received them with fear and trembling, and shook so much, I could hardly hold them, till I saw your handwriting. Oh, blessed news; and all well! I tore open the seals, and your last date, which is August 29, tells me George is safe at home, and all well! So—I am at ease! thank God! thank God.—Do not let any body direct the letters but you; because that alarms me dreadfully. Never mind what you write, your handwriting is all I want to see, though your letters continue, as they always were, interesting and precious. Your lace, table-cloths, &c. you may depend upon having; and I wish to buy for you a black silk cloak, lined with such fur, as you once had, on a white satin, that you may not perish in your long penance at church. It shall be handsome, and yet sober and decent; such as you like."

To the Rev. Wm. Otter, Jesus College, Cambridge.

“CHRISTIANIA, October 24, 1789.

“—— We were surprised to learn that you halted a day or two at Elstad, instead of selecting a spot among the sublime scenery you afterward visited in the neighbourhood of Douvre fiel. But let me congratulate you upon the tour you so fortunately selected. Surely nothing can equal Norway! I have never seen such sublime scenery any where in Europe. Sweden is far inferior. Angermanland resembles it in its features, but is never so grand. If our journey were to be repeated, I would go first through Norway to Trondheim, and thence to Nord Cap, and afterward to Torneá and Stockholm.

“What a fine opportunity you had to collect plants on the Douvre Alps. In all our travels I have never seen such a profusion of rarities as flourish there. We were too late for flowers, but collected seed; particularly some beautiful species of Saxifraga. The *Gentiana Campestris* is still in bloom; also many varieties of *Ranunculus*.

“I have the skins of the Norwegian lynx, white fox, mountain squirrel, snow riper, cock of the wood, &c. Richard tells us, you saw some Laps near Roraas. We weary him with inquiries after you.”

“Oh that we could meet you once again! Both the Ankers are princes; and act as such to us, but above all Columella Anker, whom you did not see.”

To the same.

“STOCKHOLM, December 8, 1789.

“—— Oh, what a journey! It interests me too much.—— I am in a fever from morning till night. Could any one expect to find such a field of antiquity in Lapland? A view of mankind in their origin opens before me, so extensive, and so glorious, that human vision cannot bear it. It comprehends all the descendants of Japheth, spreading their colonies and language over the north-western world. In the Swedish, I behold the origin of my native language, somewhat corrupted in Norway, and almost obliterated in England. I can speak it feebly; but the little I have acquired will be soon forgotten. What intellectual darkness covers us all. I seek after wisdom, and the result

my inquiry is only a conviction of my own gross ignorance. Every day I perceive I know less and less, and should give it up in despair, were it not for the reflection, that I am more contented, more happy, more acquiescent, than when I thought I was wiser. What is to become of us! Are we ever to know any thing of the earth on which we live, and of primitive causes? Two-thirds of the race of men vegetate, and lift not up their eyes to the light—the inquisitive few labour in vain.

‘ But much they grope for truth, and never hit,
Yet deem they darkness light, and their vain blunders wit.’

“We have been in almost every province of the Swedish dominions. Our journey in Norway was very pleasing. The king has resigned the chancellorship of Upsal in anger. It is expected his reign will be very short. There are insurrections at Gotheborg and Gefle. A scarcity of corn prevails, and the value of paper money is so low, that corn cannot be imported, but at a price which places it beyond purchase. I perceive you did not get half my letters. We have preserved the *Rubus Arcticus* in spirits, in sugar, in books, in seed, in roots; in short, in every way, which may ensure it a growth in England. Tell Don at the Botanic garden, I have plenty of seed from the gardener at Upsal for him. We attended Thunberg’s lectures there in botany; also those of Afzelius in chemistry. I shall bring home a chest full of books; ditto of drawings, maps, costumes, &c.; ditto of Lapland productions; ditto of minerals; ditto of antiquities; ditto of *slang*. Tell Hailstone I have trap enough for him, and that Estmark of Kongsberg will give him a complete collection, if he will sail across from Lynn to Christiania (which is only seven days) to see him. —

“They have translated Alonzo and Imogine into Swedish, preserving the metre.

“In many parts the strong analogy of the language to the English is striking, as *döds-kalle*, or, as it is pronounced, dead skull, for a skeleton’s head. And take one of the lines, it is curious—

Låt Hjelmen från hufudet falla—

“And now according to the pronunciation—

Let Helmen from off ud het falla—

“And now in literal English—

Let helmet from off his head fall.

"We set off in three days for Petersburg. You have bereaved us in taking the two volumes of the *Voyage de deux Français* ; but if you have left it at Petersburg, it will do. We cannot buy it here.

"The little wagon we bought for fifty dollars lasted us till Tronheim, and we there sold it well. I wish I could say the same of the phaeton we brought there. We have now purchased a magnificent affair for eighty pounds, made at Vienna ; a close carriage, full of drawers, mysteries, and conundrums, lined with blue morocco. It is a monstrous porcupine ; and if I did not hope to go in sledges, in Finland, I should fear the whole would fall to pieces. Apropos, we have had no appearance of winter yet, and walk about without great coats. The thermometer is not at the freezing point. The climate is dry and fine. We had never any rain ; from June till the beginning of November, not a single drop. Tell the Jesuits, it is a shame they have never written ; if they will send a line by return of post to Petersburg, it will be worth a treasure to me, and cost them little trouble."

To his Mother.

"STOCKHOLM, Dec. 10, 1793.

"As Cripps' friends have written to desire he will visit Petersburg, before his return, we are no longer under any apprehension as to their being impatient of our delay. He would go to the mountains of the moon, if I would consent to accompany him. I never had a more active, useful, or pleasant companion in travels. He is always endeavouring to make me happy, and therefore I ought not to omit making him this acknowledgment.

"You may be sure I want no spur to make me extend a plan of enterprise ; but as George is returned, and many other things call me home, I really wish to be in England. Cripps is very urgent in pressing me to accompany him to Moscow, and to Vienna, and as I foresee all this will keep me out much beyond the time limited for my return, I lose not an instant in making it known to you.

"If I go with him to Moscow and Vienna, it will occasion a delay of two months at least. This being the case, I cannot be in England before May ; but I positively will not be absent after the end of April, if I can possibly get home. I think you will agree with me, that I ought not to lose the opportu-

nity of visiting Moscow and Vienna, which may never occur again. Cripps, moreover, has put himself to the expense of a handsome carriage, and done every thing which he thinks may conduce to my comfort and convenience. There is another reason for my staying out, which is the unpleasant and dreary journey through Prussia, in the depth of winter, where the roads are almost always impassable without accidents. We have here the most delightful weather imaginable."

Mr. Clarke finally left Stockholm for Petersburg, on the 14th of December, 1799, having previously spent some time at the University of Upsal, and examined with great attention the whole of the mining district of Dalecarlia, of which he has given a very full account in his travels. Grislehamn, where the next letter is dated, is a small port of Sweden, upon the Gulf of Bothnia, at which travellers usually embark for the Aland passage to Abo, the capital of Finland: this passage, which is generally very interesting and beautiful, being for the most part thickly studded with islands of red granite, clothed with dark pines, exhibiting to the traveller, as he sails along, a variety of picturesque groups, and forming occasionally the most curious and intricate straits, presented nothing but dangers and difficulties to Mr. Clarke, who was more than a month in completing it. By Mr. Malthus and the author of this memoir, who made the passage in fine weather, it was effected in less than two days, and to them it only appeared too short. In the first part, betwixt the coast of Sweden and Aland, the sea is open, as the map will show.

To the Rev. Mr. Satterthwaite, Jesus College, Cambridge.

GRISLEHAMN, on the Bothnian Gulf,
Dec. 15, 1799.

— "The circumstances of our long journey have doubtless been detailed by others to whom we have written. Denmark, Sweden, Lapland, part of Finland, and Norway, we have completely traversed. But Sweden has occupied most of our time. We have passed through every province in the empire, except a small territory south of Stockholm, bordering on the Baltic. You will find I have not been idle. My

drawings, most of which are from my own sketches taken on the spot, were considered as an object of public curiosity even in Stockholm and Christiania; where the manners and customs of the Laplanders are more known than in Jesus Combination Room, though much less understood. This may seem a paradox to you; but I assure you no people are more ignorant of the ancient history and geography of their own country than the Swedes. If, when things are at the worst, any change will be for the better, Sweden will speedily improve. Its finances are annihilated; manufactures stagnate; public credit is at an end; literature expires; the poor are oppressed; murmurs rise in the provinces; insurrections are begun in Gotheborg and Gefle; and the merchants are becoming bankrupts. The winter is but just opened, and already there is a scarcity of corn. The paper money is worth nothing; therefore, corn cannot be imported, but at such prices as to be beyond the reach of the poor.

"We are now going through the south of Finland, or Finland Proper, to Petersburg. I mention this, to distinguish it from the former part of our travels in Finland; which comprehended Ostero Bothnia and Wasa, before we crossed the Gulf, in our way to Halsingeland, Herjedalen, and Norway. I wish I could give you an idea of our figures, as they would not fail to amuse you. On our feet we have thick yarn stockings; over those, stout leather boots; over those, sheep skin boots, with the wool on the inside; over those, reindeer hides, with the hair on the outside. Our heads, and bodies, and hands, are wrapped in flannels and furs; and with all these in a close carriage, we cannot prevent the escape of caloric. The cold is excessive. Thermometer twenty degrees of Fahrenheit below freezing, at noon day. The strongest Madeira wine becomes solid in our carriage; and our bread and meat present no other consistence and flavour between the teeth than that of a snow ball.

(Here he gives a sketch of his person and dress.)

"Such am I, *O quam mutatus*, at this moment. Did you ever see a biped better equipped for the other world? Pray for me, if you have the least spark of humanity. Tell Caldwell, I may perhaps look like a well-fed animal, but, gramercy! 'tis all error. Bowels empty and groaning—tympanum relaxed and flabby—mouth ready to water at a rotten egg—what will become of us!—we have not had a good dinner since we left Cambridge. Do send us a box of frog to Petersburg, or, at least, such an account of your feasting, that we

may live and grow fat in the perusal of it. It is very uncertain what route we shall take from Petersburg; but I believe to Moscow and Vienna. My health is improving, and if Cripps' visions were to be realized, we should see round the globe. Sometimes he is raving to explore the wilds of Siberia; at others, he would lead me to Astrachan, and bathe in the Caspian sea.

"It is now getting dark; I will finish this letter at Abo.

"When I professed my intention to finish this letter at Abo, I was not aware of my own presumption. There was so much delay in our getting a vessel, that it ended with our being detained five days at Grislehamn, by a tempest. On one of these, we were near lost in attempting to leave the place. On the morning of the sixth day, before it was light, the sailors, who belonged to Aland, and were impatient to return, called us, saying that we must go on board with all possible expedition, as the weather was more mild, and the wind somewhat favourable. After what we had experienced before, it was folly to venture again, without a certainty of tranquil seas; but it was the height of insanity itself, to suffer them to take our heavy carriage in the same boat. Thinking it imprudent to dictate to mariners, I let them have their own way. Now, their boats are not accustomed to take large carriages; neither are they fit for it. You might as well put to sea in a saucer, and if the saucer is half filled with snow, and very shallow, you will have some idea of the Finland passage boats. The shore is so formed, you can have no knowledge of the weather, until you get clear of the land. The sky looked horribly red in the east, and as black in the west, in which quarter the wind was.

"The wind gathered additional force each instant as we left the land; but the wind was nothing compared with our arch enemy the sea, which having been agitated many days, to the astonishment of the sailors, presented mountains of boiling water. I had once the misfortune to sail in a storm, off the island of St. Kilda, in the Atlantic ocean; but I never saw such a spectacle as this. I observed the consternation of our boatmen, and you may be sure I felt it. Cripps was in the carriage; it was no longer possible to conceal our situation. All subordination was lost; and that fearful confusion in which men lose all presence of mind had taken place. I begged they would put back; but was told that to alter the course of the boat, would ensure her going down. So rapid was the change, that within ten minutes from the beginning of our alarm, all hope was gone. I prevailed on them to take Cripps from the carriage, that he might be lashed to an oar. He was

taken out ; but not a hand could be spared to do more. At some distance from our stern, appeared a boat in equal distress ; but so far to the windward, that there was no hope of her venturing down to save us, if the boat went over ; and we have since learned, she had enough to do to bale out the water, which filled every moment on her lee-side. Our boat took in water on both sides, and laboured dreadfully. They began now to reproach us, on account of the carriage. ' For God's sake heave it overboard ! ' we all exclaimed ; but they assured us, the mere attempt to move it would upset us. Every thing got worse and worse. We had at the helm an experienced seaman, who had taken the management of the vessel from the moment our danger appeared. He advised them to let go the foresail, but would not suffer the mainsail to be touched, as we had already fallen too much to the leeward, and if we did not keep up to the wind, we should be driven into the Baltic, and inevitably perish. The noise and yelling of the sailors, is still in my ears—crying out, whenever the mountain waves approached. Upon such occasions, they let the vessel fall off with the wave, and she was carried into a gulf of foam ; which broke over us, covering all our bodies, and sometimes forced us to quit our hold. At last, every hope seemed to vanish. In despair we clung together upon some sacks, near the stern, and during the short intervals, when the sea left us, had recourse to fervent prayer. It pleased Providence that we should at last escape. What our feelings are, you will better imagine than I can express. I assure you, my blood is chilled with horror, as I now write to you. How we were preserved, I know not. All I recollect of our first glimpse of hope is, that after a considerable time, the island on which the telegraph is stationed, appeared to leeward, at a great distance, under the boom of the mainsail ; but the sea still was in its greatest commotion. Soon after the men began to shout, and we had an island to windward, which afforded us more tranquil water. We then sailed close to land, but it was impossible to reach it owing to the surf.

"Having cleared these islands, matters went better, and soon after mid-day we arrived at Ekerö."

To Captain George Clarke.

"By way of a date, One day shorter than any other.

"It is by no means so easy as you may imagine, to give you an idea of my situation at this moment. Few maps will tell

you, where the island of Vardö lies, and those few are not within your attainment. It is a portion of that range, or cluster of insular territory, which goes by the name of Åland, in the Swedish charts, and chokes up the entrance of the Gulf of Bothnia. I am now endeavouring to effect a passage to Åbo, in Finland; and from thence to Petersburg. Sometimes we are drawn across the ice on sledges; at others, it is a labour fit for Hercules to cut a channel through it, sufficient to admit a boat, and in the widest parts we sail.

"The narrowest squeak I ever had for my life took place in passing from Grislehamn to Ekerö, with a large and heavy carriage in a boat very like Master Muddle's hat. When the water is in a passion in these seas, it is more like the boiling of a kettle, than the gentleman-like roll of the Atlantic.—"

"It has been impossible to get home so soon as I intended. And as we cannot reach Cambridge before the Term divides in February, it is of little use to break our necks in the hopes of getting there a few days after; so we have extended the plan of our tour; in consequence of which I shall not, I fear, see England before the latter end of the spring; but I will do my best, as I long to show you how to brew the real Powder Plot; fourteen bushels to the hogshead.—"

"We are now in a little wooden hovel, about ten yards and a half square, waiting anxiously for morning, that we may cross the rest of these islands. When you receive this letter, we shall be in or near Petersburg; as I do not put it in the post till we land in Finland. Cripps, and his little dog, who has been with us in all our wanderings, are asleep upon some straw, in one corner. John, his servant, is broiling a piece of stock fish, as he says to keep life and soul together. Peter, our interpreter, is smoking with the boatmen, in another hovel. Such are the joys of enterprise."

To the Rev. William Otter, Jesus College, Cambridge.

"ISLE VARDÖ, between Bomarsund and Kumlinge,
in the passage to Åbo, from Grislehamn,
Christmas day, 1799.

"Have you forgotten this little place? If so, you are happy. I fear I shall have too much reason to remember it. I sent a letter to Satterthwaite from Bomarsund, giving him an account of our escape from 'a wat'ry grave.' Cripps is now upon the island of Kumlinge. I have not seen him since yesterday

morning. I attended him as far as that island, and finding that the Lappoesi passage was not frozen up, I returned back in the same boat, and have been again to Bomarsund for our carriage, which they had persuaded us to leave behind ; positively declaring that it was impossible to take it farther. As I like to combat impossibilities, I have conducted it safe to the water side, and in the morning it will go with me to Kumlinge. I have been no less than seven times, backwards and forwards from the sea to this village, which is about five English miles from the shore. We are compelled to wind in all directions, through forests, &c. to avoid the ice, which is not every where strong enough. However, I brought our heavy carriage across the two sounds Bomarsund and the Vardgatta, and you know what they are. I have had twenty-five peasants at work the whole day, and if it please God to let this north-east wind sink a little of its fury, I shall have the satisfaction of giving Cripps an agreeable surprise before noon.

"We have used sledges ever since we landed in Aland. Nothing can be more delightful than such a mode of travel. It may appear paradoxical, but we suffer less from cold in an open sledge, than in a close carriage ; and as for the motion, I know not how to give you a better idea of it, than by referring you to the description of Leonora's ride behind Death, in the German ballad ; rocks, forests, rivers, seas, islands, seem to fly beneath us, as if we travelled through air. Now is the season for a trip to the pole. I would wager to be at Enara Trask in a fortnight, and hail the new century upon the icy sea.

"I have many things to say, and much advice to ask. We shall not get home before the year 1800 ; but before the month of June, I hope to be there. I mention this, because, though a man's ideas may travel fast enough over a map, I do not think yours, respecting our journey, will move so fast as our bodies. For instance, if I tell you, I am going into Asia—that I intend to visit Tartary—that I shall certainly pass the Volga—that I shall afterward follow that river from Kasan to Astrachan—that from the Caspian to the sea of Azof, and the Black sea, I shall journey to Constantinople—then I know you will give a whew ! and say, Yes, his health is restored, but at the expense of his reason. Why he will not get to England these two years ! Now let me beg of you, neither to entertain such ideas yourself, nor to encourage them in other people. If Cripps had not pressed me to extend his travels, I should have been in England by the end of January, from Petersburg ; but when our plan was altered, I gave more time to Stockholm, and to other objects. I am now very sorry I did not send our

seed to you. It is gone in different cases to England. I thought to have planted them myself, and felt proud in the hope of showing you the *Dianthus Superbus*, the *Pyrola Uniflora*, the *Pedicularis Lapponica*, and many of the rarest of the *Saxifraga*, in our College garden. We have at this moment roots of the *Rubus Arcticus*, which we have long kept in moss. It is still alive, and puts forth buds, but it can never reach England, according to our present plan.

"Now for your advice. I wish you to tell me, in a letter, which you must instantly send to Petersburg, '*aux soins de Messrs. Paris et Warre*,' what plants I can collect on the banks of the Volga, and in Hungary? Also, what books will illustrate the botany and natural history of those countries? I should think the Genus *Gnaphalium* will appear in greater glory than any other, when we get to warmer climates. The view of our plan will suggest many other things.

"P. S. This is my second letter, and it finds me again in Bomarsund. The north-east raged with unabated fury during thirty-six hours. I had no anxiety: as they assured me the storm would keep the sea open. Guess my grief and astonishment, when at daylight this morning, I beheld it a solid field of ice, as far as the eye could reach; and all this in one night! God knows when I shall see Cripps again—all communication is cut off: he is on the bleak island of Kumlinge—doubtless in the greatest anxiety. I am alone without clothes or books. There is a hope that if this severe frost holds four days, I may walk over to him; the distance is twenty-one English miles. I have already driven a sledge with a horse over the Vardgatta and Bomarsund. Cripps has the thermometer; I should think it must be thirty degrees of Fahrenheit, below freezing, as the sea did not freeze at 25.

"Second P. S. I have opened my letter again, to tell you we are safe in Abo; but if I were to tell you all that happened since this was sealed, I must begin a volume. Suffice it to say, that after being a week separated from Cripps, by twenty-one miles of ice, I undertook a circuitous route by the island of Sattunga, and performed a walk of seventy English miles in two days across the sea. The peasants, who were my guides, deserted me in the midst of the ice, refusing to proceed. The cold was so severe, that the exercise of walking alone enabled me to support it. What think you of thirty-nine degrees of Fahrenheit, below freezing? Brandy became solid in an instant. At last, more dead than

alive, I reached Kumlinge, when all communication with the island was said to be shut. Cripps and I came in open sledges to Abo. On the second morning of our journey, John's face became frozen, and we have been afraid it would mortify. Cripps had two spots in his; and Peter and the peasants recovered their noses with snow. I escaped all these to undergo severer trials. Last night the cold was at 40. Some said the mercury was rendered solid. Cripps and I had closed the stoves. In the night we were seized by convulsions. I lost all animation in my feet, hands, and nose, and it was not till this morning that the circulation of the blood was restored. Cripps is still unwell. A violent headache is all that remains to me. Adieu! After many escapes from death, I still have power to trouble you.

"We have got very comfortable lodgings, and mean to wait here, while Peter goes back for the carriage, which can now be conveyed in sledges on the sea."

To the same.

Abo, Jan. 18, 1802.

"My last letter was full of disasters and difficulties. I hoped to have ended the catalogue; but really our lives were not worth ensuring at sixpence an hour, from the time we left Grislehamn. We are now bound in thick ribbed ice. The Baltic, and all the rivers are adamant. I was misinformed about the mercury being frozen. Professor Gadolin says it congealed in his thermometer last year, when it fell in Abo to forty degrees of Celsius. Our greatest cold now is twenty-seven of Celsius, below 0, at noon, and at midnight it has been thirty and thirty-five. The people stare to see an Englishman walk about without great coat or pelisse.

"You will wonder to find us still here; but still more when you hear that we wish to prolong our stay. I am become a student here; and, I do assure you, little as I have hitherto esteemed study in a foreign university, I shall ever acknowledge my obligation to this. We have received great kindness from all the professors; but the venerable Porthan, whose history of Finland will render his name famous through Europe, is my master; and I hope to carry through life the same memory of his instructions, that I have of his kindness. He took a fancy to converse with me when I first came here; and

as it will benefit us both, I am become of the number of his pupils.

"We have here a circle worth tracing in the line of professors. Porthan, in history and antiquities; Hellenius, in botany; Gadolin, in chemistry and mineralogy; and Franzén, in poetry. They beat Upsal out and out. The Upsalians at present are bitten by Kant; and nothing is heard of but his philosophy, which, I am told, he does not himself understand.

"I have such a picture in view!—but alas! I shall never get it. They have destined it for a church, I know not where."——

CHAPTER VI.

Petersburg—Moscow—The Don—Sea of Azov—Crimea—Constantinople—Mount Ida—Plain of Troy—Cyprus—Jerusalem—Cairo—Pyramids—Aboukir—Alexandria—Zis—Eleusis—Parnassus—Constantinople—Pass of the Balcan.

MR. CLARKE and Mr. Cripps entered Russia at the worst period of the Emperor Paul's tyrannical and fantastic government. Hence the vexatious regulations of which he complains so heavily.

To the Rev. Wm. Otter, Jesus Collage, Cambridge.

"PETERSBURG, JAN. 31, 1800.

"—— We have been here five days. Our servants were taken from us at the frontiers, and much difficulty had we with the Russian thieves as we came along. Long accustomed to Swedish honesty, it is difficult for us to assume, all at once, a system of suspicion and caution: the consequence of this is, that they remove all the moveables in their way. I wish much to like the Russians; but those who govern them will take care I never shall. This place, were it not for its magnificence, would be insufferable. We silently mourn when we remember Sweden. As for our harps, there are no trees to hang them upon; nevertheless, we sit down by the waters of Babylon, and weep. They open all the letters, and therefore there is something for them to chew upon. More I dare not add; perhaps your experience will supply the rest.

"My astonishment was great at finding Mr. Ellis here; do you not remember my going from College to his seat in Hert-

fordshire, when poor W. Beadon and Stracey accompanied me as far as Barkway? Sir Charles* is a father to us all, and Ellis a brother. We have dined with somebody every day, and are engaged for a week to come. They also promise us balls and masquerades. I thought to study hard; but my wishes are vain—or else, I have Pallas, and Le Clerc, and Buxbaum, with a host of botanists around me. I dined this day with a gentleman from Astrachan, where we intend to go if possible. They all urge us to it; and it is said to be very practicable. We have a magnificent suite of apartments at the Hotel de Grodno; which are to be open once a week to the savans, if the police permit. I found in Sir Charles's house, the very officer who was your fellow passenger in the packet, when we sailed from Yarmouth: do you not remember the young officer, from Neufchatel, who set Malthus a-laughing, by coming up one day on the deck singing, with his mouth and night-cap all one side? We met him after-ward in Hamburg. A most remarkable plant has been sent to Copenhagen, or rather three plants, all of different classes, genera, &c., proceeding by three different stems from the same root. Let me say five words of botany, that dear science! I won't keep you long in agony.

I found in Norway a species of the *Stellaria*, I believe the *Stellaria Arenaria*, which possessed a character something of this kind. The plant itself was of the *Decandria Trigynia*, but near its root was a most remarkable florescence exhibited among the foliage, which fell together, like the turning of a cabbage; and, on separating the leaves, it betrayed a perfect flower of the *Tetrandria Monogynia*.

"Perhaps on the very spot where you collected the *Pyrola Uniflora*, in Norway, I obtained its seed. What a beautiful flower! and how interesting for us! I gathered it, and gave it you on the Hunneberg mountain—on the day and hour of our separation. Will it grow in Jesus College garden? Cripps would be a botanist, if he had a better tutor—set him to hunt for a flower, and he is sure to find it; you cannot offer him better sport. He would have made a fine greyhound to Linnaeus.

"I held forth in the schools at Åbo; determined to astonish their weak minds, I attacked the most established truths, and they were dumb. 'Alas!' said I, 'you are as reeds in the breath of opinion—it blows, and you bend with trembling. Linnaeus told you—' *Naturalia tariffariam seu in tria regna na-*

* Now Lord Whitworth; at that time the English Ambassador.

turæ dividuntur: Lapideum Vegetabile; and Animale;’ and then you bawl out ‘recte statuit Linnæus,’ taking his creed in part. When he affirms ‘Natura modificat Terras in Vegetabilia, Vegetabilia in Animalia, vix contra; utraque resolvit iterum in Terras,’ what becomes of the division? The universe is one; and the soul of matter is itself material. What Linnæus applied to plants, applies to all—light is the soul of plants, and it is the soul of universal nature, and its base is oxygen. To prove this, we can show the absorption and deposition of oxygen by means of light. Motion is generated by the affinity of substances; and as all substances have their greatest affinity for light, without light there could be no motion. At the moment of creation, ere motion was communicated to matter, it is said, ‘darkness was upon the face of the deep.’ ‘Let there be *light*!’ said the Deity, and *motion* was instantly communicated!’

“What was the fate of all this farrago? you exclaim! Why, in a twinkling I had a train of pupils to the new philosophy. —‘Novelty,’ said I, ‘it possesses not. It is the theory of Moses—to your Bibles go for information.’ The dispute ran high and I left it to subside; fearful least by throwing too much *light* upon the *matter*, the *motion* would be too much for me.”

To his Mother.

PATRICKSBURG, Feb. 24, 1800.

“I know not how it happens, but in this journey I hardly ever receive any news from home. Sure it is easy to take up a pen for a minute, when it is considered what value we place upon a few words. Cripps gets letters, almost every post; and in those I sometimes hear that all is well at Uckfield. I would give fifty guineas, for as many words in thy handwriting, best of parents! even at this moment. But when I see letter after letter come to Cripps, and not one word to me, I think it very hard. Think how I am employed from morning to night, and often night and day—scarcely ever experiencing one moment of repose—and yet I write; which I assure you is not easy when every instant has its important occupation. If I write letters, my journal suffers; and often I have time and strength for neither.

“I know it will please you to learn that we are both in perfect health. I have not been better for the last twelvemonth:

You have proof of this whenever you find I can sit down to write, in fair characters, a long letter about nothing.

"We have this day twenty-six degrees of cold, which is beyond what people in England are able to imagine. It is equal to forty-five degrees and a half, below freezing, of Fahrenheit, as we estimate it from the scale of Celsius. In Petersburg, not a house is without a thermometer, and advertisements appear regularly in the papers, stating that if the cold is below seventeen, there will be no opera, which is the case this evening. Yet it is the most charming weather possible. There is no humidity in the atmosphere, which makes the severest season more tolerable than an English winter. Cripps and I walked to-day, and basked in the sunshine, while the Russians, as they passed in sledges, with their long beards, had their eyebrows, eyelashes, and hairy chins, covered with icicles. The English bear cold better than the natives. Even I have exposed my face to the air, when the driver of my sledge, behind me, has had his face frozen, and covered with livid spots, which we remove by rubbing the skin with snow. I have had my face only once frozen, a small spot in my left cheek. Mr. Cripps often gets a spot or two, and his servant John had all one side of his face, and part of his nose, congealed. No injury ensues if you rub it with snow; and we laugh at one another, when these strange marks appear; which make you look as if you had stuck wafers on your face.—

"Will you know what a kибитки is, with which you may travel all over Russia, at the rate of one hundred English miles a day? It is such a pretty looking affair as this.

(Here he gives a sketch of a kибитки with his pen.)

"Should you like to travel in a kибитки? Because if you come here, it is done in a moment. You have only to sit still in your carriage, whenever one of the royal family passes, instead of getting out and pulling off your pelisse, cloak, great coat, gloves, hat, &c. and you are bundled into a kибитки, and sent to Siberia, with your nose slit. All letters are opened; and if my beautiful drawing was seen by a police officer, I should visit the mines of Tobolski, with expedition and economy. I think, therefore, it will be as well to wait till our ambassador sends a courier to England, before I dismiss my letter.

"The statue of Peter the Great is a very fine statue; but an equestrian figure, which is colossal, upon a mountain, which is in miniature, is an absurdity in proportion, equally offensive to

taste and reason. The carnival began, I believe, yesterday. We have balls, masquerades, races, and amuse ourselves with sliding down a slope of ice, of about the height of Uckfield church steeple, which is a favourite pastime here. The court go first, and after the court the nobles, and after the nobles, the foreigners of distinction; after the foreigners, the merchants with their wives and daughters, and then come the *bourgeois*.—

“Did you ever know that my father’s letters on the Spanish nation were translated into German? How it would have pleased him! A copy of them, in the German language, is in the public library of the University of Abo, in Finland.—

“This is the most expensive place I ever was in. Nobody is of consequence here, but in proportion to the money he can spend. The nobles, ambassadors, and even the English merchants, keep open tables, at all which a stranger is expected to dine. No invitation is sent. You inform the upper servant, or *maitre d’hotel*, in the morning, and present yourself, without ceremony, at the hour of dinner. What I now tell you is a fact, incredible as it may appear—*fifty pounds* are often paid for a dish of fish. Our ambassador has given twenty. And this fish, called *sterlet*, is not better than a turbot, nor so good—only it comes from the Volga, a long way off, and is difficult to procure. At the same table we see, veal from Archangel, mutton from Siberia, *sterlet* from the Volga, apples from Astrachan, grapes from Persia, porter and strong beer from London, wines from France, Spain, Italy, &c., strawberries from Lapland; in short, the whole world is ransacked to supply their sumptuous banquets.

“We shall go to Moscow as soon as possible: the principal part of the nobles are there; and we are told we are to witness still greater doings when we arrive: from Moscow to Vienna.”

To the Rev. Wm. Otter, Jesus College, Cambridge.

“PETERSBURG, March 5, 1800.

—“The plates for the first part of Vol. II. of Pallas’s *Flora Russica*, are finished; but the typographical and descriptive part is not yet arrived from Germany. It will be published in the spring. The author of the *Flora Petropolitana* assures me, it will all be completed gradually. I have purchased the two first. They are already scarce and expensive. I shall not buy duplicates for you; because you will always use mine,

and I know you will be angry, if the number of our acquisitions should be diminished by superfluous profusion in any one. But you must write me word to Vienna, if you bought the *Flora Danica*; because I am commissioned to inquire if you possess it.

"Did you procure the *Gentiana Glauca* in Norway? We found it near Roraas, and on the mountains above Tronheim. Dr. Muller of Christiania wanted to persuade me that it was the *Gentiana Campestris*. It is lovely beyond description. Scarcely peeping above the earth, as blue as the voluptuous eyes of May. I send it to you.

(Here he gives a painted representation of the flower.)

"I now recollect, that the plant I once brought from Newton, from the highest of the Swiss Alps, and which I found blooming on the snow, was the *Gentiana Nivalis*; perhaps the most elegant of all the family. This last I will give you seed of. What an acquisition I have just made here? many hundred seeds of Siberian, Russian, and Kamschatkan plants. I will pledge myself to bring home all the plants in the *Flora Russica*, *Flora Lapponica*, *Flora Helvetica*, and *Flora Germanica*. You must supply what is wanting to complete the *Flora Swessica*. We had last night the good fortune to procure a copy of Gmelin's *Flora Siberica*; but it is not quite complete. Why does Linnæus pretend that the *Cratægus Aria* is peculiar to Sweden? It is found here, and, according to Pallas, also in England, under the name of the Cumberland Hawthorn. I saw this morning a collection of botany amounting to eight thousand plants. The owner will not sell it. But Dr. Muller of Christiania would sell his collection of Mineralogy, for 1200*l.*, and perhaps for 1000*l.* Certainly there is no other equal to it in Europe. A subscription at one guinea per head would obtain it for our University, but alas! they would sooner spend, individually, twenty times that sum, to ride in a stage coach to and from London, than, collectively, a single sous for the advancement of science. I should not wonder if the inspectors of the Petersburg post-office, profiting by the information this letter may afford, when they open it, were hereafter the cause of its being brought to a Russian academy.

"To other matters haste we now. The masquerades here are very grand. The Empress, with all the court, and two thousand persons, attended on Sunday evening. But the masquerade began in the morning at ten o'clock. We had another last night: Cripps appeared in five different characters in the course of the evening. Your friend, Mrs. G., was most bril-

liant—crimson and gold. We are often invited there, but we do not go as we visit the opposite party.—I went with them last night to the masquerade, and Miss G. wore my hat and feather.

“The carnival is now over. It is the holyday of the year. The astonishing procession of sledges to the ice mountains is a proof that the population of this place is greater than they pretend. It would make you tremble to join the Russians in their favourite amusement. The height of these mountains is as great as the tower of Jesus chapel. A fellow places himself on a small sledge, and takes you in his lap; then leaning backwards with his hands on the ice, which act as rudders, you are committed to the winds, and down you go, like lightning; acquiring a velocity which carries you for half a mile on the plain surface of the Neva below, till you reach an opposite mountain, and descend as before.

“I get no letters from England. In mercy, write a few lines, *à la poste restante, à Vienne*. We go to Moscow in ten days, and from thence to Siberia. In this last assertion, I speak in hope. It must depend on the state of the snow. If we cannot sledge it, we shall hardly have time. What would I not give to complete my plan; to follow the waters of the Volga to the Caspian; to cross the Caucasus, and seize old Achmet by the beard, in the walls of his seraglio. As for the eastern provinces of this mighty empire, if a man does not spend a couple of years previous to his expedition in serious appropriate study, his researches would avail little. What do we know of those northern tribes, the Samoyedes, the Jakoutes, the Tchutchkis, the Koriaks, or the Kamschatkans? Most of them I believe are Fins; but what a world of science ought a man to possess, who shall attempt to investigate the history of Siberian Tartary!—of the Cossacks!—the Calmucs!—and the Tungusians! And to travel without rendering some illustration of a dark subject, is like a tasteless sot in a Dutchman’s garden; wandering in a labyrinth, for the sake of losing his way. I don’t know what Pallas may do; but at present he seems to have thickened the waters of science, by stirring up the mud, to show that something is at the bottom. Botany, attended with less difficulty, and greater satisfaction, invites for a small portion of the year; and Mineralogy might supply the rest. One incitement to Botany, when it is pursued upon an extensive, general, and philosophical scale, is, that it makes us acquainted with the productions of climates and countries removed from our notice in the observation of those which are before us.—How remarkable are the characteristic changes in the *Betula*! In every degree of latitude, advancing to the

pole, proportionably diminishing. I found the *Betula Nana* on the frontiers of Lapland, not larger than the palm of my hand; and a species of the *Salix* the size of one's thumb-nail.

"By the first ship that sails for England, I shall send the *Rubus Arcticus*. It will be conveyed to the Botanic gardener at Cambridge. Make him take care of it for me, and tell him, if it be alive when he receives it, he must place it in the earth, and cover it entirely, till the beginning of June. Then he must take off the cover all at once, and leave it exposed. This is the only method which has been found that will ensure its bearing flowers and fruit, so far to the south. It was recommended to me by Professor Atzelius, of Upsal. The plant will be sent in a pot. At this moment its roots are with me in moss, frozen as hard as iron; and they have been in that state these last three months. The cold here is now severe. We have it, daily, from eighteen to twenty-five degrees of Celsius, below 0. Yet the sky is serene, and without a cloud. Next Monday, a party of ladies come to spend the evening in our apartments, which are handsome and spacious, in the *Hotel de Grodno*. We have prepared for them a Russian concert, consisting of thirty-seven performers upon horns, some of which only play one note."

To the Rev. Robert Malthus.

"PETERSBURG, March 12, 1800.

"Your interesting letter, dated November 25th, only reached me last Sunday. Captain Popham, the messenger, is ill at Umea, in Ostero Bothnia. He has been obliged to go all round by Torneå, owing to the state of the ice between Grislehamn and Abo; I had great risk for my life in that passage. A courier goes to London to-morrow; so that I shall be able to lay aside the order of Mum! which prevails here in its utmost force, and write freely. I have had a padlock on my lips the whole winter, with these initials upon it, P. P. It is impossible to say what will be the end of things here; or whether the Emperor is more of a madman, a fool, a knave, or a tyrant. If I were to relate the ravings, the follies, the villanies, the cruelties, of that detestable beast, I should never reach the end of my letter. Certainly things cannot long go on as they do now. The other day, the soldiers, by his order, cudgelled a gentleman in the streets, because the cock of his hat was not in a line with his nose. He has sent the Prince de Condé's army

to the right about, which is hushed up, and it is to appear that they are ceded to Britain. He refuses passports even to ambassadors for their couriers. One is not safe a moment. It is not enough to act by rule, you must regulate your features to the whims of a police-officer. If you frown in the streets, you will be taken up.

"E. is delighted and vain in the present you have sent him. Sir Charles C., Lady H., &c. are all quarrelling who shall read it first. I had been holding forth about it, long before it arrived; and E. is much flattered that he received it.——

"I will answer all your queries. As to our disappointment at Tronheim, it was heightened in finding that a letter from us, from Stockholm to you, was lying at the post-office, when you were there, and you did not receive it. It contained matters and information that would have interested you. Among others it made known to you the arrival of Lord Grenville's letters, which at that time would have given you satisfaction.——

"Cripps now pants for a dip in the Caspian. Joking aside, I cannot say too much in his praise; he thinks no exertion too great, if it contribute to improve my health, and make me happy. This is a selfish eulogium, but it must go for gratitude. He begs I will tell you, that he has too much lead for a tourist; but nevertheless, has seen the phenomenon, and explored the mountains of Lapland.

"I will answer your inquiries respecting the 'Maison des Enfants trouvés,' in my next. I am at present much occupied with Botany, though it is not the season. I shall bring home plants, which never were seen by any eyes but those of the person who gave them to me. They are from the remotest deserts of Kamschatka. My own Lapland collection will be interesting.

"We go to Moscow in a few days. We have now the finest weather imaginable: neither wind nor clouds. And people say, 'What a warm day this is!' when we have nine degrees of cold of Celsius. But it must be added, we have had thirty; and Cripps drove me across the sea, when it was at twenty-seven, and our faces were full of spots, as fast as we rubbed them out. It is disagreeable weather here, if we do not have at least five degrees of cold; otherwise it snows. The sky at this instant is of the finest blue, without a cloud. The cold is much less felt than in England, being always dry. Ladies drive in sledges, without caps, powdered and curled and plumed, as for the court. The Emperor is now planting trees in the perspective. What next? Mr. Pug! Yesterday a carriage and four drove out of a yard, in the Million, and did not

see the Emperor on horseback, who had just passed, but turned suddenly, and drove on. The Emperor sent back afterward his police-officers, and directed them to a wrong house. It was a merchant's who never drove with four horses, neither had any such ever been in his yard. Nevertheless his coachman and footman were ordered to be taken up, and sent to prison. The merchant protests against this flagrant injustice, and is answered, that if it was not his carriage he must find out whose it was: the servants meantime are detained in prison, for no crime whatever. Adieu !"

To his Mother.

"PETERSBURG, March 29, 1800.

— "We are in daily expectation of leaving Petersburg. Particular circumstances, which I cannot now tell you, prevent our seeing the Hermitage, and the Houghton collection. We have waited week after week, on that account; and at last I believe, must give it up. We set out for Moscow, either the 31st of this month, or April the 1st. If it is the latter, I can assure you, we showed ourselves more of *April fools* in coming, than we shall do in going. Mum !

"We shall stay three weeks or a month at Moscow. About the first of May we go to Vienna, by the way of Kiow, passing the Ukraine, and through that part of Russia which once belonged to Turkey. Arriving at Lemburg, we shall bear towards the south-west, and crossing the Carpathian mountains, traverse Hungary, to Presburg, and thence leave it for Vienna. This journey will employ us three weeks. We shall end the month of June at Vienna. From Vienna we go to Dresden, and Berlin, and thence to Hamburg; where I hope to arrive, time enough to see you before the middle of, or, at farthest, the end of August. This plan is determined, and you may depend upon our adhering to it. We shall not go into Italy, for I perceive it will detain us too long; and if Cripps does not particularly wish it, there is nothing in Italy, which will be new to me.

"I am in perfect health. The time we have spent here, quietly, has reposed and tranquillized both mind and body; and I am armed to encounter new exertions, with health and strength. Excepting the pictures at the Hermitage, I have seen every thing in Petersburg. Arthur Paget is sent Amba-

der to Naples: Think what an advantage it would have been to me, if I had gone there, with such a friend at the head of affairs.—

"I cannot resist sending my sister some seed in a small packet, which she will laugh at, but she knows not how much I value it. I cannot get home in time to sow it; but she must get it sown with great care, in the garden or in pots. It is the scarcest plant in the world. I found it in Lapland—a sort of pink, and its name, according to Linnæus, the *Dianthus Superbus*.—I believe it must be sown the day it arrives. It is found in the forests and meadows of Lapland, and two hundred miles within the arctic circle. You will observe, therefore, a plant which has been accustomed to the frigid zone, wants very little nursing at Uckfield.

I have been introduced to the Abbé Edgeworth (who attended the King of France in his last moments) by the Ambassador from Louis the Eighteenth. Dumourier is also here: I have dined in his company several times. When I get home I will show you profiles of both of them.—

"We had yesterday a degree of cold, which will make you shiver to read. What think you of twenty degrees below freezing, on the 28th of March? Every thing is still buried in snow. We drive always in sledges, and are to go to Moscow in the same way. The streets, the tops of houses, and every object one sees, are covered with snow, which almost blinds one with a constant glare, as it never thaws, not even for a moment."

To the Rev. William Otter.

"Moscow, April 25th, 1800.

— "You are eager to learn something of this singular city; and I feel happy in giving you that knowledge; because from our long intimacy, I can make objects familiar to your eyes, which another person might not render visible.

There is nothing more extraordinary in this country than the transition of the seasons. We have no spring. Winter vanishes, and summer is! This is not the work of a week, or a day, but of one instant; and the manner of it exceeds belief. We came from Petersburg to this place, *en traîneau*. The next day, the snow was gone. April the 6th, at noon, the snow beat in at our carriage windows. The same evening, arriving at Moscow, we had difficulty in being dragged through

the mud to our inn. The next morning, the streets were bare, all carriages on wheels, the windows thrown open, the balconies filled with spectators, and for several days past, the streets have been dusty, and we have, in the shade, twenty-three degrees of heat of Celsius' thermometer.

"Fortune loves chance, and by one of those chances, we arrived here at the season of the whole year in which Moscow is most interesting to strangers. Moscow is in every thing extraordinary—in disappointing your expectations, and in surpassing them—exciting wonder and derision—pleasure and regret. We are now in the midst of the Paques; which is here celebrated with a pomp and festivity, unknown to the rest of Europe. The most splendid pageants of Rome, do not equal the grandeur and costliness of the church ceremonies; neither can Venice, in the midst of her carnival, rival in debauchery, and parade, and licentiousness, and relaxation, what is now passing in Moscow.

"I want to conduct you with me to the gates of the town, and thence through the streets. You see its numerous spires glittering with gold, amidst domes, and painted palaces, in the midst of an open plain, for several versts before you reach it. Having passed the gates, you look about, and wonder what is become of the town, or where you are, and are ready to ask, 'When shall we get to Moscow?' They will tell you, 'This is Moscow!' and you see nothing but wide and scattered suburbs, huts, and pig-styes, and brick-walls, and churches, and dung hills, and timber-yards, and warehouses, and the refuse of materials sufficient to supply an empire, with miserable towns and miserable villages. One might imagine that every town of Europe and Asia had sent a building, by way of representative, to Moscow. You see deputies from all countries holding congress. Timber huts from the north of the Gulf of Bothnia, plastered palaces from Stockholm and Copenhagen (not whitewashed since their arrival,) painted walls from the Tirol, mosques from Constantinople, Tartar temples, pagodas, and pavilions from Pekin, cabarets from Spain, dungeons, prisons, and public offices from France, ruins and fragments of architecture from Rome, terraces from Naples, and warehouses from Wapping.

"Then you hear accounts of its immense population; and wander through deserted streets. Passing suddenly towards the quarter where the shops are situated, you would think you could walk upon the heads of thousands. The daily throng is there so immense, that, unable to squeeze a passage through it, you ask, 'What has convened such a multitude?' and are told 'It is always so!' Such a variety of dresses—Greeks,

Turks, Tartars, Cossacks, Muscovites, English, French, Italians, Germans, Poles, &c.

"We are in a Russian inn. The next room to ours is filled by the ambassadors from Persia. Beyond these lodge a party of Kirghicians, a people yet unknown. Beyond those, a party of Bucharians, and all of them are ambassadors, sent from their respective districts, to treat of commerce, peace, and war, at Petersburg. The Kirghicians and Bucharians I keep at arm's length; but our good old friend the Persian visits us, and we visit him. His name is Orazai, and I am so great a favourite with him, that he admits me to be present at his devotions, and I see him stand for hours on a carpet, with his face to Mecca, in silent meditation. It is then, he says, he holds intellectual converse with Mahomet. Yesterday he gave me a pair of Persian slippers as a memorial; and I gave him a knife to shave his head with.

"We went at midnight to the cathedral to be present at the ceremony of the resurrection. About two o'clock in the morning, the Archbishop, and all his bishops and priests, in habits of embroidered satin, covered with gold and silver, and precious stones, bear their consecrated candles to look in the holy sepulchre, and finding that Jesus was risen, announce to the people with a loud voice, 'Xpurmoch, bockpecb!' that is to say, 'Christ is risen!' and at the delivery of those important words, the signal is given for eating flesh, feasting, drinking, and dancing. To be drunk the whole of Easter week is as much a religious observance, as to abstain from flesh in Lent, and the Russians are very punctual in religious observances.

"Of course, you saw at Petersburg the Russian priests, in their long black beards, and with their hair flowing in long ringlets, without powder, or quite in straight locks, over their rich robes and shoulders. No figure can be more respectable than a Russian priest. I look at them, and fancy I behold Moses or Aaron, or one of the high-priests of old, holy men, standing by the tabernacle of the congregation, in fine raiments, the workmanship of 'Bezaleel, the son of Uri, the son of Hur, of the tribe of Judah.'

"I send you the portrait of the Archbishop of Moscow, well aware, at the same time, that the resemblance will not inspire in your mind the reverence I entertain for the original:

(Here he gives his portrait.)

"The 'Club des Nobles' permit us to have tickets for their balls and masquerades, which many travellers have found it

difficult to obtain, because the laws of their society exclude all persons who are by birth plebeian.

"I wish I could give you any account of their balls, which might enable you to form an idea of their great magnificence. I assure you, I have seen nothing to equal it in Europe. The beauty of the women of Moscow is beyond all imagination. To adorn this beauty, no expense is spared. The dresses of both men and women are to the highest degree sumptuous. A whole fortune is here seen lavished upon a single dress. And then so much taste is used in the display of it, that I would have the women of Paris come to Moscow, to see their own fashions exhibited to the greatest advantage. A person who is not richly dressed, is hardly thought fit to go into company, and we are obliged to appear in full uniform from morning to night. We must therefore set up a new suit at Constantinople.

"Apropos ! I have not told you our plans for the rest of our tour. We have made every preparation to go to Turkey, by the way of the Black Sea. I think we shall not go to Astrachan, though much recommended to us, because the passage from thence to the Black Sea, over Mount Caucasus, is difficult, and requires time. But we shall go two days' journey from Moscow, and embark on the Dnieper, passing through Kiow to Cherson and Oczacow ; from thence to Perecop, and through the Crimea to Sebastopole, where Professor Pallas resides, and to whom we have a letter. From thence we cross the Black Sea to Constantinople ; and from thence, through Bulgaria, by Belgrade, and through Hungary to Vienna. This we shall certainly attempt to do ; the only alteration may be in the beginning of the journey, as many wish to persuade us to go down the Don, to the capital of the Don Cossacks, and from thence to Taganrok, on the sea of Azov, before we begin the tour of the Crimea, and this last is perhaps the most probable. At all events, the Black Sea, the Crimea, and Constantinople are our objects now.

"Davy lamented that I should waste the moments of enterprise among the forests of Lapland ; little thinking I should travel by the Aurora Borealis to the plains of Troy. But as it beams electric have shone so bright, I may find my way there before the darkness of death intercepts my view. He wishes me to see Greece ; how surprised he will be to receive a letter dated from Athens, from a man who set out for the Arctic circle. It is a pantomime prank, in a man who one minute flies out at the sky-light, and the next pops his head through the trap-door of the cellar.

"The Persian Ambassador gives me a cordial invitation to

the town of Terki, on the western shore of the Caspian. He writes me notes in Persian, and sends his Cossack interpreter to translate them for me. Some of my visiting cards, engraved in Bond-street, will be found in his palace in Persia. What a transition ! 'Not at all !' says he, 'we could be there in a few days.' Heavens ! what a fever he puts me in, when he talks of such a journey, as we do of going from Cambridge to Carlisle ! The rest of the globe is but a desert. Africa ! America ! what are they ! Asia, excepting China, is a monotonous waste. The vast regions of east and west Tartary, will not recompense the difficulty of exploring them. As for the north of Asia, the Kamschatkans, the Samoides, the Ostiaks, are mere Laplanders, which, once seen, are known for ever. But let us not leave an acre of Europe untraversed. It is an easy work, and its completion will make us acquainted with almost all the productions of the earth. By going from North Cape to the mouth of the Persian Gulf, we become acquainted with all climates, frigid, temperate, and torrid. Plants in similar latitudes are the same ; and there is little of the animal or mineral kingdom, which such an expedition would not offer to our eyes. We should see all that is instructive, and worth research. The rest remains for generations who may appear when the memory of European nations is swept away. For how small a portion of the globe is yet civilized ; if any part of it can be said to be truly so !"

To his Mother.

"Moscow, May 24, 1800.

"I received about a fortnight ago letters from my sister and brother ; precious and welcome messengers, though filled with the most dreadful alarms, respecting the health of my beloved mother. Your handwriting I have not seen so long, that painful presages seem to tell me, I shall never see it again. Write to me, my mother, if it is but half a line, and tell me, without disguise, how you feel yourself to be.

"The history of all your London excursions, of your new fish-ponds and promenades, of your papered parlour, and hermitages, is all a romance to me—a pantomime, in which with a whew ! all the scenery changes.

"In this country I hardly know what I dare write. We have been detained here almost as prisoners of war, and though we leave this place in two or three days, you would hardly

suppose we should have gone to Constantinople. The fact is, we follow the advice of our excellent ambassador, Lord Whitworth.—As the distance is much the same from Moscow to Constantinople, or from Moscow to Vienna, we go first to Constantinople, having with us letters to all the great people there, and then we return through Hungary to Vienna. My mother, who knows what I suffered by the loss of my journey to Egypt, will partake with me in the joy and satisfaction I must feel in the prospect of visiting, and with so much ease, the plains of Troy.

“Our return to England will not be retarded. We shall get home in the summer. Indeed it is absolutely necessary we should be in the North of Europe, to be ready for the Hamburg passage before the Elbe is frozen.

“In the Crimea we shall see Professor Pallas, so well known for his travels in Siberia, and Captain Billings, who discovered a great part of the north-west coast of America. For an account of this astonishing city, I must refer you to my journal. It is impossible to begin such subjects upon a sheet of letter paper. Cripps has been very much noticed both in Petersburg and Moscow. The grandeur and extravagance of the nobles and inhabitants exceed all I have seen before. Nothing is thought elegant or genteel here, but in proportion to the money it has cost. We are obliged to be in full dress from morning till night, and even our uniforms would not be allowed to admit us into company, if we were not travellers. You would see here a nobleman on horseback, among a thousand others, whose saddle cloth is covered with diamonds, and his saddle of the richest embroidery: his stirrups of solid gold, set with diamonds and large pearls. A merchant's wife has sometimes six and seven thousand pounds sterling of pearls and diamonds on her head and in her dress. In a common fair, among the mob, you will see the wife of a shopkeeper with lace, such as our Royal Family may wear on a birthday. At the ‘Club des Nobles,’ where only persons of noble birth are admitted, the number present, the first night we were there, amounted to two thousand; whose dresses were all according to the description I have given. They suffer us to enter as ‘Milords Anglois,’ a name always given to Englishmen abroad.

“We are both in very good health, and only beseech you all, whatever length of time may elapse without your hearing from us, never to think it a reason for anxiety or alarm. Letters, especially here, are often intercepted or lost. Through the countries where we now go, there can be no post; therefore it is not possible you should hear from us soon.”

To the Rev. William Otter.

"TULA, June 2, 1800.

"Now is the time to write to you, though my journal lies neglected, and even my mother expects a letter from me, and many things besides. But I know you will send my letter to her, and then it will do as well; for I have much to say to you.

"We have left Moscow at last, and are upon our sublime expedition; which, to tell you the truth, I feared we should never undertake; for reasons I dare not now give, but you will guess. Even when I wrote my last to you, it was a kind of melancholy satisfaction to tell you, that it would not be our fault if we did not go. We have resolved on the plan. It is now begun; and all looks fair and bright before us. My health is good; and our friends have supplied us with a trunk-full of letters to Governors, and Khans, and Cossacks, and Tartars. Do for God's sake imagine what I must feel in the prospect of treading the Plains of Troy! Tears of joy stream from my eyes while I write, and to crown all, it is no mad scheme of mine which I have persuaded Cripps to take. He determined upon it, in consequence of the advice of Lord Whitworth. The servant who accompanied poor Tweddel upon the same expedition, goes with us; and I entertain sanguine hopes of being able to recover several manuscripts and drawings belonging to him, which were scattered upon his death. This servant is a Turk; who, besides his native tongue, speaks Russian, Slavonic, Greek, Italian, French, and has a smattering of German.

"Now pray attend to my plan, because I should be unhappy if you thought I could have done better; and I assure you, it is not the result of a moment's thought, but has been changed half a dozen times.

"I at first wished to see Casan, and a little of Siberia; but after our residence in Moscow, finding that every thing for at least 3,000 wersts eastward, was merely Russian, without even a change of costume or language, through a flat, uninteresting country, I gave up my journey to Siberia. Motteux, nevertheless, is gone to Tobolsky; the same who was in Lapland and Norway.

"Now, we intend to leave the common track to the Crimea; because I hate wearing other people's shoes, and it has been made by Lady Craven and others. Our journey will be from this place to Waranetz; and from thence we cross the great deserts, inhabited in parts by wandering Kalmucks, till we reach the country of the Don Cossacks. When we arrive

at the most eastern inclination of the Don, we shall cross over to Zaritzin, on the mighty Volga, and perhaps visit Astrachan, on the Caspian Sea, though there is nothing very interesting there. It is a people of yesterday—English merchants, Italians, Russians, and Cossacks. Then we regain the Don, and sail down that river to Tscherschaski, the capital of the Cossacks of the Don, to whose protection we are recommended by letters from high and mighty Cossacks in Moscow. Then we visit Circassia, and other parts of Asia; perhaps collecting plants on Mount Caucasus. Then we go to Taganrok, on the sea of Azov, where Peter the First wished to found the capital of Russia before he built Petersburg; and to the town of Azov, and somewhere in this neighbourhood I hope to find some traces of the ancient Tanau. Then we traverse the Crimea; having letters to Pallas and others. Then Cherson, Oczacow, and Constantinople; and I need not tell you where we shall go, when we get there. One thing is certain, that we shall not go to Athens; and strange as this may appear. I think you will agree with me, that enough have been there; at least of such travellers as we are: for to visit Athens to any purpose, there should be another Tweddel, with draughtsmen, and modellers, and so on; and to visit merely Athens, without the rest of Greece, would be acting like a man, who came to Moscow to see the great bell, satisfied his curiosity, and returned immediately. As the situation of the plain of Troy will be so near us, we shall certainly go there, and then return through Bessarabia and Hungary to Vienna; visiting Belgrade and many other interesting places. We hope to reach England before the passage from Hamburg is frozen up.

“Our collection of the minerals of Siberia, is very valuable. We have about eight hundred specimens. For botany, we are just beginning the year. This day we found a plant, which I believe was never described: and when you see what Linnæus said of Muscovy in his *Bibliotheca Botanica*, it will appear probable.

To the same.

“WORONETZ, June 9, 1800.

“What would I now give to have you near me, to point with your finger, and say which way we should go, or to go with us! You would find me here under the greatest uncertainty, every road is so interesting, that I know not which way to turn. I came here in hopes of water carriage to Tscherschaski, though

I knew it would require more time, on the fine river Don, the ancient Tanais, now possessed by Calmuc Tartars, and the Don Cossacks. But it is one thousand miles by water to the Palus Mæotis, and only five hundred by land. Add to this, a little reported danger from the deserts, as well as the river, and a necessity of providing arms; but, as I have always found such accounts mere bugbears, I suppose they are without foundation. Our carriage wants a little saving by water, if we can manage it. Now you see, if we had gone to Kiow, we should have seen curious catacombs, which are nothing new, malgré their antiquity; but we could have sailed by water to Cherson and Oczacow, down the Dnieper. What is there to be seen there? All the world knows! Then to have gone by Perecop, through the isthmus to Sebastopole; all that is very fine; because it is pretty to enter a peninsula by its isthmus. But then it is very little farther, to go by the capital of the Don Cossacks, to Taganrok, Azov, Kaffa, and the capital of the Crimea to Sebastopole. From Tscherschaski, the first of these, we can visit part of Circassia, and perhaps mount Caucasus. If we go by water, we can cross over, from the Don, to Zaritzin, on the Volga; and visit Astrachan. Taganrok is where Peter I. wished to establish the capital of the Russian Empire. At this place, Woronetz, he launched his first ship of war, when he intended to be master of the Black Sea: and his house, and his machinery, are still preserved. Here are also the tombs of ancient Tartars, and we sleep on a living sepulchre of their conquerors—a party of jolly Russians, with their heads shaved, imprisoned in dens, below our bedrooms, for murder, theft, and other amusements—so that nightly, as I press my pillow, the clanking of chains, and the horrid laughter of mad misery, gives me a gentle hint to feel for others what they seem to regard with apathy themselves. Azov, in Asia, was once of great importance. I hope to find, in its neighbourhood, something of the ancient Tanais; but, to tell you the truth, I might have been better equipped for such a journey; having neither books nor maps; and trusting to a very addled and empty brain, for all that is to guide us. After Azov, we shall travel, if we take this route, along the north-west coast of the Palus Mæotis, till we enter the Crimea; and this will not be by the isthmus, but by a passage you will find more apropos. We then go to Kaffa, the ancient Theodosia; from thence to Karas-ou-bazar, capital of the Crimea, with a letter of recommendation to the governor, from the prime minister at Petersburg. Then to Sebastopole, with a letter to Pallas. Thus you see, we shall lose Cherson, and Oczacow; because from

Sebastopole, we sail for Constantinople, but I know not how to estimate a loss, which seems to me a gain. Tweddel, as his servant informs us, opened some tombs in the neighbourhood of Nikolaif, beyond Cherson and Oczacow; and found there Greek vases, which he never after suffered to be out of his reach. What a loss was this man! I am sure from what I hear of him, and the manner in which he passed his time, that he made discoveries of the utmost importance to history, which are lost for ever. We like very much his servant, and he gives us daily anecdotes of his late master; which are not merely amusing but instructive. What Tweddel did in such a journey, others may rationally wish to do. How few such men exist among us! enlightened by science, and flushed by enterprise; scaling the precipices of knowledge and glory. To travel with one of his disposition and talents, I would black his shoes in the morning, and fry his fish at night, contented only to tread in his footsteps, and profit by his information.

"Shall we ever cease talking when we meet? What have I not to ask of you, respecting the nations which surround me! These wonderful Tartars! who are they? and where did they start from?—a race of wild bipeds, overthrowing empires and establishments, planting a Calmuc upon the throne of China, and the schools of Athens in Samarcand! They come riding on their dromedaries through the south of Russia; and if you ask them a question, respecting their great Tamerlane, they stare in your face and pass on.

"Cripps found a plant in the wood the day before yesterday, the most beautiful I ever saw. We have disputed about it. He will insist, that he found it for you in Denmark, and that you called it the *Myosotis Lappula*. But it is not of that class. It is *Hexandria Monogynia*, *fol. alternis amplexicaulis*; *caule tereti*, *pedunculis axillaribus multifloris*; and, therefore, can be no other than *Convallaria multiflora*. If the flowers, starting from the foot stalk, between the leaf and the stem, had been solitary, and the stem a little more compressed, I should have called it *Convallaria Polygonatum*; but never *Myosotis Lappula*; therefore, it must be some mistake of his. I will show it you, well preserved, when I get home.

"All that we now feel anxious about, is the time we have to spare. Were it not for the uncertainty of the passage by Hamburg, it should go hard with us, but we would visit the capital of Persia, Ispahan. As it is, we must be contented to place our feet in Asia, and return. We shall certainly visit the Plains of Troy, get a view of Mount Athos, perhaps visit Tenedos, and return through Belgrade, by the Danube, to Vienna. We are now full of the idea of sailing down the Don, with

Europe on our right hand, and Asia on our left. Whatever route we finally decide upon, you will know by the next letter, as it must be dated from some place more decisive, in that respect, than the town of Woronetz.

"We are drinking the wine of the Don, and making very copious libations to the health of every timber of Jesus College. Cripps promises to send some to Jesus Combination Room; if we can prevail on the Cossacks to sell it, and send it to Constantinople. But they make little more than they consume themselves, and are not willing to part with it. I can assure you it laughs Burgundy to scorn.

"Let my mother know that you have heard from me. I shall write to Uckfield immediately; but my letters there, are hardly ever answered. And, in this respect, I have no reason to be very grateful to you, for I cannot get a line. Pray do not forget to remember me to Mr. Tyrwhit, and include Cripps in the same memento. Tell me in a letter to Vienna, 'aux soins de Messrs. Fries and Co.' what we can bring him home, that will give him any pleasure. You know already how much we both esteem that man. He always calls my father to my mind. As for Malthus, tell him he is not worth writing to; he is wrapped up in other matters, and obliterating all the traces of his pilgrimage. Will he be ready to start again next spring? Ask him that! I put him to the test! He has a great deal 'trop de plomb, pour un tourist.'

"A poor woman was taken out of the river this evening, who had been bathing, and fell beyond her depth. She had never sunk, and was not motionless, when they laid her on the shore. Yet not a single Russian, for any price, would assist in restoring her to life. A police officer took down the circumstances of her catastrophe in writing, and she was left to expire upon the sand; surrounded by hundreds of spectators.

"We are now in the latitude of London; and behold every where English plants. What a change, from the gelid regions we have inhabited! The heat is here so great, that I think it must be cooler in England. The thermometer of Celsius, this day, at noon, a northern aspect, in the shade, ran to twenty-nine degrees above freezing. This equals twenty-four of Beaumur, and as we have not Fahrenheit's scale, you may estimate it yourself.

"June 10th.—We have decided at last, and shall go by land. I find vessels are sometimes three months in passing down the Don: whereas the journey by land may be performed in four days. But we went so far as to hire boats, and made every preparation; having decided for water two hours ago.

A a

"This place becomes a very large town, and increases daily. I wish I could send you a view of it. When we arrive Tscherchaski, I shall take a walk into Asia; and the moment I set my foot there, I shall endeavour to amass for you, the choicest blossoms of Circassia; that is to say, those which are portable. Good bye! my dear friend! I cannot add a word more, for my mind is on fire with enterprise; and as oriental and as extravagant in its ideas, as the Tales of the Genii! No more for an explosion!

ODE TO ENTERPRISE.

I.

On lofty mountains roaming,
O'er bleak perennial snow,
Where cataracts are foaming,
And raging north winds blow;
Where hungry wolves are prowling,
And famish'd eagles cry;
Where tempests loud are howling,
And lowering vapours fly:

II.

There, at the peep of morning,
Bedeck'd with dewy tears,
Wild weeds her brows adorning,
Bold ENTERPRISE appears:
While keen-eyed EXPECTATION
Still points to objects new,
See panting EMULATION,
Her fleeting steps pursue!

III.

List, list, celestial virgin!
And, oh! the vow record!
From grovelling cares emerging,
I pledge this solemn word:—
By deserts, fields, or fountains,
While health, while life remains,
O'er *Lapland's* icy mountains,
O'er *Africa's* burning plains;

IV.

Or, 'midst the darksome wonders
Which earth's vast caves conceal,
Where subterraneous thunders
The miner's path reveal;
Where, bright in matchless lustre,
The lithal flowers* unfold,
And 'midst the beauteous cluster,
Beams efflorescent gold;

V.

In ev'ry varied station,
Whate'er my fate may be,
My hope, my exultation,
Is still, to follow thee!—

* "*Crystals*, the blossoms of the mineral world; disclosing the nature of stones, as these of vegetables are made known by their flowers."

When age, with sickness blended,
 Shall check the gay career,
 And death, though long suspended,
 Begins to hover near—

VI.

Then oft, in visions fleeting,
 May thy fair form be nigh,
 And still thy votary greeting,
 Receive his parting sigh:
 And tell a joyful story,
 Of some new world to come,
 Where kindred souls, in glory,
 May call the wanderer home."

To the same.

"TAGANROK, on the Sea of Azov,
 June 31, 1806.

"Who would have thought, that on the very day twelvemonth, in which we were bathing in the Wener Lake, one of us would bathe in the ancient Tanais? On that very day I entered Tscherchaski, the capital of the Cossacks of the Don, and threw myself into the river to solemnize the anniversary. There, swimming between Europe and Asia, I thought of you, of Uckfield, of England, of all that is dear. What a tract have we traversed, in a single year! the whole extent of Europe, from its remotest angle at the pole, to the burning deserts of the Calmucs and Cossacks; from the Icy Sea to the Palus Mæotis! and the whole diameter of the Russian empire, from the frontiers of Finland, and the Baltic, to its utmost limits in the south.

"What have we been taught by all this? One important fact—that there does not exist in Europe a settled *savage* people. It is ignorance to talk of dangers from this or that nation; all Europe is civilized, that is to say, humane. I do not include the Nogaik Tartar, whom we have here, nor the Calmuc, because they are wandering tribes like the Segankas or gipsies, and the roving Laplanders: yet even these are not less humane, though more wild, than our smugglers, or the Irish peasants.

"I should like to know what would have been the result, if a party of Collegians, bound for Tscherchaski, had heard what they told us at Moscow, of the danger of traversing the deserts of the Don Cossacks. Post-masters, officers, nobles, persons pretending to possess accurate information, filled our ears with stuff. What do you think of Cripps, who could say to me, 'I

præ, sequar! Is he not a lad of enterprise, and fit to see *femini-
mons*? When we got among the Cossacks, and found them
the best fellows upon earth; we asked, Where are the banditti?
They referred us to the Calmucs. Presently, came along the
Calmucs mounted on their camels, and again we asked, Where
are the banditti? They referred us to the Nogaik Tartars.
Now, we have visited them, and they answer the same ques-
tions, by a reference to the Circassians and the Kuban Tartars.
As we are determined to hunt down all these bugbears, that
future travellers may sleep in peace, and not move from place
to place with armed convoys, as we have done, we shall again
cross the sea of Azov, and travel through part of Asia to the
south of the Crimea, and cross the Taman straits to Kaffa, the
ancient Theodosia, visiting Kuban, the capital of the Zaporochi,
on the river of that name, which falls from the highest of
the mountains of Caucasus, into the sea of Azov.

“Our European dresses are laid aside, and we have adapted
ourselves, as much as we can, to the burning climate of these
regions; for though in a latitude little south of Cornwall, the
heat is intolerable; and the mosquitoes almost as bad as in
Lapland. I believe I must tell you a secret; that, with all my
dashing and slashing, I fear this will be my last journey. My
health has failed through the whole of it, and, *peu-à-peu*, I seem
to be *going out* like a farthing candle, that has enlightened no
one. The fire of enterprise burns within me, and keeps me
moving; but my body is a wet and withered weed, that turns
all its flame to smoke. It is with the greatest difficulty I can
exert myself to write. Thank God, as yet I have no blank to
lament. Plants, Minerals, Antiquities, Statistics, Geography,
Customs, Insects, Animals, Climates; every thing I could ob-
serve and preserve I have done; but it is with labour and pain
of body and mind. Without such a mild, active, and attentive
companion as Cripps, I should never have persevered.

“My letter to my mother has been very short. As she
knows I write to you, if they ask to see this, tear off, or blot
out this part, and say it was on a subject of ancient history,
not fit for them to see.

“Do tell Malthus, that we have now got more than one real
porcupine. What will he say to hear that we travel in a car-
riage with two subterranean bears, that are as tame as our dog;
and that eat any thing we give them—one of our loaves, or
one of our shoes. It is really true! How I should like to see
Malthus laugh when he hears this. They destroy as much of
our linen as Mrs. Webb would do in a given time. But as
they are animals totally unknown in Europe, not having ever
been named or described by any naturalist, I hope I shall suc-

ceed in bringing a pair of them, male and female, to England. They grow to about the size of a large cat, or lap-dog. We lost one out of the boat the other day, in coming from Azov to this place. We sailed down the Don, with Europe on our right hand, and Asia on our left, to Azov, and from thence into the sea to this place.

"I must now tell you of a discovery I have made, which you will deem of more importance, and will amuse your sages at Cambridge. The city of Tanais never was stationed where Azov is. I have found the cause of the name Tanais, which the Greeks gave to the Don. In crossing the deserts, I came to a river, which the inhabitants of the country called Danaets, and was surprised to find, that, with this suspicious appellation, it fell into the Don. Something was gained; but it falls into the Don at one hundred and forty versts from its embouchure, therefore the Greeks owed nothing to it. But, behold! and remarkable to relate, in sailing down the Don, a northern division of it turning off into the sea of Azov, towards the coast of Nogaik Tartary, again bears the name of Danaets, and is called Dead Danaets, to distinguish it from the former part, which is called Northern Danaets. The people pretend that the waters of the Danaets here separate from the Don, and fall into the sea by themselves; whereas, in fact, it is only one of the mouths of the Don, but has been called Danaets from time immemorial.

"Now it is all plain; for the Greeks navigating the sea of Azov from the Crimea, and according to the custom of those times, as well as the present day, keeping always close to the shore, passed along the coast of Nogaik Tartary, and arrived at the northern embouchure of the Don, which they found named Danaets. Of course, however far they proceeded up the river, they always gave it the same name, and it is not probable they went far up. But the Greeks, like almost all the nations of Europe, changing the D into T, which they ever did, obtained the name Tanaets, or Tanais, for I do not suppose the sailors of that day were more particular in their orthography than those of the present; especially in writing a mere sound, uttered by savages. It would puzzle at this moment an English captain, who heard the Tartars, or Cossacks, name the river, to write down the word, and he might make it Danaets, Tanaets, or Tanais, just as he fancied it sounded. And from whom have we the pronunciation?—from Cossacks and Tartars! both of whom are new-comers into the country where the river is situated, and may have corrupted the purity of the word, making Danaets of Danais. It

is worth remark that the modern Greeks have no such letter as D; they pronounce it *Th*, and call Delta, *Thelta*.

"Tanais, if ever it existed, must be discovered at the northern mouth of the Don, and not at Azov, where there is not the slightest indication of it. I go to-morrow to Sinofka, a village situated there, to see what farther may be made known.

"Cripps has been asleep these three hours. He begged I would say something of his remembrance to you. Good night! God bless you! I will write again from Constantinople, or the Crimea."

To his Mother.

"TASANROK, on the Sea of Azov,
June 31, 1800.

"In one of those burning nights, which this climate affords, and when time is more precious than you can imagine, I hasten to write a few lines to you, to say we are in very excellent health, and though we have not arrived so soon as we intended in England, we are pressing forward with all speed. We pass from this place through part of Asia to the south of the Crimea, and from thence by Constantinople to Vienna. When you consider what we have done in one year, you will think I am inaccurate, if I promise to be with you in the autumn.

"Another motive for writing is, that I know you will be happy in my writing a letter to Otter, as I am now in the land of all sorts of antiquities. But I cannot fear you should think me deficient in my duty, or that I wrote to him when I ought to write to you. The fact is, my letter, and the only one I have to write, must necessarily be filled with subjects of ancient history and geography, which would fatigue more than amuse you, and if ever you are curious to see it, he will send it to you.

"July the 1st, 1800.—Contrary wind enables me to add a few words. I shall get a shawl or two at Constantinople, but what I wish most, is to get something for you, and I know you will not tell me what to bring.

"We are now on the sea of Azov, and have a fine prospect of it at this moment from our windows. I have made some curious discoveries, respecting the ancient geography of these countries, which I cannot now relate. We collect every thing; Plants, Minerals, Antiquities, Insects, Animals, Customs, &c.

We have two animals with us living, that are unknown in Europe. They are called subterranean bears.

"In this place we have eleven different nations. Greeks, Armenians, Turks, Cossacks, Calmucs, Tartars, French, Germans, Poles, Russians, Italians, besides us English, who complete the dozen. And they are all in their different dresses. What do you think of a Calmuc? This gentleman presented me yesterday their sacred pavilion of the written law. Look at him! and respect him! he is my particular friend.

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(Here he gives a sketch of a Calmuc.)

"He has fish-bones in his ears, and is going to drink your health in brandy, which his wife made from mares'-milk; and to-morrow they mount their camels to take part of our baggage to Azov. I have put his country-seat at a distance, lest any of the ladies coming out from their toilet, should alarm you. His favourite horse died a few weeks ago of the botts; and as he now begins to be in a fragrant and yielding state, he invites us to dine upon one of his haunches. Really, my dear mother, you should come and pass a week in one of these fine open deserts, with the Calmucs. Their diet and mode of life would be so new and amusing to you. And what is better than change of air and diet? To move from the South Downs, to the putrid marches of the Don, and from Sussex mutton to raw horse-flesh!

"We have now in one year traversed the whole of Europe, from the Icy to the Black Sea. Since we left Petersburg, we have crossed entirely the vast empire of all the Russias, from the Gulf of Finland to the sea of Azov, and rolled over two thousand of our English miles, without starting a bolt from the carriage. Huzza! my dear mother! look! look yonder! what a glorious sight!—the sea of Azov, and the fleets of Turkish merchants; the ships of Tarshish, and the Isles! The rich vineyards of the Crimea, the wide deserts of the Don, the long and loitering caravans, slowly moving in whirlwinds of dust, the ancient cities of Tanais and Theodosia, the camps of the Calmucs, and the tombs of the Tartars! Huzza! here we go again! The snow-clad mountains of Caucasus, the fair damsels of Circassia, the Armenian colonies, the roving Cossacks, the princes of Persia, and the ports of the Argonauts.

"These are fine things to see; but there is one thing more delightful to behold, which for a long time has not comforted my weary eyes; and that is, the nice, clever, neat, and interesting handwriting of my dear mother. At Vienna I shall see it and not before. And that will be in the month of August, or

beginning of September. Keep writing to that place, 'aux soins de Messrs. Fries et Co.:' every line will be worth a million in my estimation, and I shall have such a comfortable packet to open, as I had at Christiania. Tell me every little trifling thing, when you brewed, and when you baked; how many cakes Mrs. Well-r carried to the oven, and how many she brought back. Does my vine tree grow? Or is it dried up, and withered like grass?"——

To the Rev. William Otter.

JENIKALE, in the Crimea, July 12, 1800.

"We have just crossed the Cimmerian Bosphorus, from Asia. Fortunately I met with a copy of Pliny, at Taganrok, which, though an enormous folio, is our guide through these interesting scenes; and I had it in my hand the whole way. We are knee-deep in antiquities, and have broken our shins over moralizing marbles, that have held converse only with toads and lizards for ages, till our arrival. I never was so charmed with any travels as with these. Can Greece be more interesting, than countries, in which her earliest colonies laid the foundations we are ransacking? We are lodged in the house of a Spartan. His wife, a native of Paros, decks our table with roses and honey. The waves of the Bosphorus beat against his balcony. At this instant, I have before my eyes, such a range of historic territory, as would draw tears down the cheeks of apathy. Do you not see the little fleet of the Argonauts, creeping along close to the shore? the crews in canoes, surveying the objects round with the mixture of exultation, wonder, and curiosity, which we now feel? Did they steer by the European or Asiatic side? Who can tell us that now? It is of some consequence, and would determine many points. I feel reason to hope that I shall clear up, at least, a page in the doubtful annals of the historian. But what historian will enable us to account for the prodigious ruins, with which these shores are covered? Temples and theatres, that received the vows, and shook with the plaudits, of a refined people, in ages, respecting which the Grecian annals are full of obscurity and fable. Whence flowed the wealth, and where are the quarries, that supplied marble palaces, in the midst of deserts, where nature has afforded no materials for the architect? The isle of Taman is of sand and clay; and yet the ruins of the city of Phanagoria are greater than

those of Cuma. God help us! we run to Italy to see the works of yesterday, and if we visit Greece, it is thought we attain the fountain's head. Why have not enlightened travellers passed to these regions, where the earth is paved with inscribed marbles, where history might be raised from her tomb, and where the Scythians, more barbarous than their Anthropophagite forefathers, are burying the most precious records in the foundations of their fortresses? Would the Turks or Tartars were again masters of the land!

"I creep about like an owl in the sun, having no books; and were it not for Pliny, I should be quite blind. Oh that I had a few of those notes which lie useless in my study. When I was going to Egypt and Greece with Lord Berwick, I collected all the information I could find, and it is now lying at College to light a pipe. How am I to determine the situation of Statoclia, or Cepi, of Hermonassa, or even Phanagoria, from Pliny? He does not even state on which side of the straits are the towns he mentions. These are all his words—'*Oppida, in aditu Bosphori, primò Hermonassa, dein Cepi, mox Statoclia, et Phanagoria, et pene desertum Apaturos; ultimoque in ostio Zimmerium quod antea Cerberion vocabatur.*'

"Phanagoria is pretty well determined; and that being known, throws light upon the rest; I found myself Apaturos. Zimmerium, he elsewhere says, is beyond the straits, and I believe, on the isle of Taman. The soldiers in working the fortress at Phanagoria, found a small silver coin, and they gave it to me. It has a bull, with these letters above it, the rest being lost—*ΦΑΝΑ*. On the other side is a head, with a Phrygian bonnet. I copied some of the inscriptions on the marbles, and hope to bring home some of the marbles themselves, for our public library. Application is making for me to the governor of Crimea, to obtain a Greek tomb, of marble, which serves all this town as the basin of their public conduit, and the old women are meditating a punishment for me, in proposing to move off their washing-tub. It is such as Poussin and the most classic painters introduced in their pictures, with the simple, massive grandeur of the best ages of taste. It can be conveyed in a ship, though the weight is enormous; and what would be my satisfaction to see it obtain an asylum in our University, where, placed far from the reach of Scythians, or Tartars, it might inspire some enterprising mind to rescue from oblivion the rest of those inestimable relics, which are daily falling a sacrifice to time, and to ignorant barbarians.

"Since I wrote these last words. I have been called away by a message from the General of Engineers; and have the satisfaction to tell you, that no less than five marbles with in-

scriptions, &c. are now safe on board the *Madonna Turliani*, bound to Constantinople; from thence they will go to England, and to Cambridge. I hope soon to send another detachment after them. Of coins, I have obtained several, but as yet only one vase; and, though I suspected they might be found here, I believe no antiquarian has yet thought he might refer his favourite oracles to so remote an origin.

"The southern coast of the Black Sea is one continued theatre of history. Ruins are seen the whole way from Constantinople to Trebisonde, and even to Anapa. At Amasera they extend far into the sea, and columns which the waves have not had power to overthrow are still regarded by the fishermen and mariners as works of magic. Here I converse with inhabitants from all the towns round the Euxine, and they are all of one story, respecting the important objects on its shores. Amasera is only three hundred miles from Constantinople, and there, at least, I hope to go. My dear fellow, I am so tired I can hardly see what I write, or else I have much to tell you. In my last letter I gasconaded a great deal about the refinement and civilization of Europe; but I have nothing of that character to give respecting modern Asia. That part of it we traversed was full of danger and *désagrémens*. We were also eaten up by mosquitoes, and obliged to be escorted by an armed cavalry of Cossacks, amounting to six, eight, and sometimes ten horsemen, with lances, pistols, sabres, &c. We penetrated into Circassia; but it was under cover of the cannon of Ekaterine-dara. When we first arrived on the Kuban river, the Tchernomorski and the Circassians were at war, but we had the pleasure to attend the embassy of the princes of Circassia, who came from the mountains of Caucasus, with their bows and arrows, in armour, to swear the oath of peace with the Cossacks of the Black Sea, before the Pacha of Anapa. The savages of Otchereite are not wilder, and they are less ferocious, than the Circassians. Their beauty is justly praised. We saw several hundred, and the women, who were prisoners in the Cossack army, are the most beautiful perhaps in the world; that you may judge of the men, I send you a portrait of a Circassian; in his tunic of black sheep's wool, which they all wear.

(Here he gives a portrait hastily sketched with his pen, adding the neighbouring mountains.)

"We had a fine view of the mountains of Caucasus, and travelled within a few miles of them for many days, along the river Kuban. Mount Kellebores is visible at the distance of

three hundred versts ; his summit is covered with eternal snow. They are inaccessible on account of the bogs which surround their bases.

"Look at them ! and tell me whether you wish for a plant from the plains below. Such an one I can give you. Among the Circassians the labours of the plough become a warlike occupation, and the sower goes to cast his grain, attended by his sabre, his fusil, and a horse that may outstrip the winds in their course. Circassian girls sold on the banks of the Kuban, when we were there, for twenty-five roubles a piece. Parents offer their own children for sale. They sew a girdle of sheep's hides round the waists of their female infants, which is worked upon the skin, and left there for years, to give them an elegant shape. Many of them are sent to the Turkish seraglios. A Turkish merchant buys them as so many calves for the market, boys and girls. If they had taken us, we should have been carried into Persia for sale, and perhaps the only method to see the interior of their country would be to go a voluntary prisoner. One of their princes was amused, because we took off our caps out of respect to the Pacha, in his tent, and laughed very loud while he mimicked our bows, to him, no doubt, very ridiculous. Upwards of fifty princes came to the Kuban to treat for peace with the Tchernomorski.

"Our character of Asia, from the part of it we traversed, may be given in a few words—bad air, bad water, bad food, bad climate, bad people.

"I have collected insects merely that we may omit nothing which any of our friends in England may think we ought to have noticed. Our hands and heads are quite full, and that both one and the other may repose a little, I shall now wish you good night. Cripps is uneasy for fear I should forget to add his remembrance. God bless you."

To his Mother.

"ACHMEDCHID, in the house of Professor Pallas,
in the Crimea. August 15, 1800.

"Now, you are saying, 'Well, at last, I have got a letter from Ned ;' and what will it contain ? only that he and his companion are well ; and is that worth writing about, to the distance of 3000 miles ?

"You must have heard of the celebrated Professor Pallas, who travelled all over Siberia, even to Kamschatka, by order of the late Empress ; one of the greatest of the scavans of

Europe, who has published so much and so well. It is with him we now live, till the vessel is ready to sail for Constantinople; and how can I express his kindness to me? He has all the tenderness of a father for us both; every thing in his house he makes our own. He received me worn down with fatigue, and ill of a tertian fever. Mrs. Pallas nursed me, and he cured me, and then loaded me with all sorts of presents, books, drawings, insects, plants, minerals, &c. The advantage of conversing with such a man is worth the whole journey from England, not considering the excellent qualities of his heart. Here we are quite in an elegant English house; and if you knew the comfort of lying down in a clean bed, after passing months without taking off one's clothes, in deserts and among savages, you would know the comfort we feel. The vessel is at Kosloff, distant forty miles, and when we leave the Crimea, Mr. and Mrs. Pallas, and their daughter, who has been married since we were in the house, to a general officer, go with us to Kosloff; and will dine with us on board, the day we sail. They prepare all our provisions for the voyage.

"The Governor-general of the Crimea, as well as his deputy-general, Bouritzi, and prince Viazemskoi, commandant of the garrison and troops at Achtiar, have paid us the greatest attentions. We lament the necessity of expedition, or we should have liked very well to winter in the Crimea.

"We know nothing what you are all about at the other end of Europe; nor whether it is still war or peace. If it is peace, order my young vine to be trimmed and nailed over the kitchen window, and brew some strong beer, and tell Master Wood to use pump water; if it is war, inquire how poor old Truncheon does: and whether he has medicine enough to last till the French come and chop off his head; Dame Osborne, I suppose, continues the same dear, good creature, and never drinks; except 'a drap a' sumthin cumfible, a' Sundays.'

"If you do not hear from me for months together, you must not be uneasy. It is impossible to say when a letter may go; and if one happens to be lost on the long journey, there's a gap, at once, of three months.

"I should think, if I can pitch upon a nice, snug Persian carpet at Constantinople, warm from the Bagdat looms, about two inches thick, it would look very well under your feet in the parlour at Uckfield. 'Now, my dear Ned! don't go to bring home a thing big enough to cover all Uckfield.'

"We shall go straight home from Constantinople, which you will believe; because we can go no farther: the French being in Egypt, and rebellions and plagues in Asia Minor and

Syria. As for Africa and the Cape of Good Hope, we have so many visits to pay, that our friends there must excuse our calling this time.

"I had like to have forgotten a principal thing. Perhaps by this time you have received a great case from London containing fruit in glass jars, &c. Whenever it arrives, pray take the greatest care of it. We sent it to you because we feared it would ferment and be spoiled. It contains two sorts of Lapland strawberries, boiled in sugar. But as they were done by different people, some contain more sugar than others; boil them all over again with fresh sugar, and do whatever you can to save them; but do not mix the two sorts together, nor the bad with the good. It is a fruit which was never seen in England. You will find two small bottles containing the plant and its fruit in spirits of wine; let them be kept safe, as they are. I know you are famous in preserving such things, and therefore, having great hopes from your care, we ordered them to be sent to you."

To the Rev. William Otter.

"ACHMEDCHID, capital of the Crimea,
August 27, 1800.

"Now I am a little more upon my legs, and can write you a long letter full of interesting matter about this remarkable peninsula. I told you I arrived, like an owl in the sun, but growing accustomed to his beams, I blink less, and see more. I had no books, and trod classic ground, without knowing where I stood. You know I had a letter to Professor Pallas, the great luminary of the Scythians; and to his benevolence I am indebted for every comfort I enjoy here, and perhaps for my life. In the midst of weakness and fatigue, I caught a vile tertian fever, the paroxysms of which were beyond my strength. He became more than a father to me; he received me into his house; became my physician, my friend, my instructor. He gave me health, amusement, repose. I am recovered, and, thank God, and my good Samaritan, for being able to enjoy leisure and study, among scenes the most interesting I ever saw. At this distance from the walks of science, he finds it so interesting to converse with men who are fond of his pursuits; and has taken such an affection for me, that he gives me books, insects, plants, antiquities, drawings, and I believe

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would empty his library for me, if I were selfish enough to permit it.

"I made a tour from this place through the Minor Peninsula of Chersonesus ; and afterward traversed the southern coast of the Crimea, on horseback. My raging fever accompanied me the whole way. It was on my return that I took possession of these delightful apartments, where my mornings are passed in study, and my evenings with the most polished and agreeable circle in the whole Russian empire. His daughter has been married, since our return, to a general officer. We accompanied her to church, and joined in celebrating the wedding. Cripps is in the full enjoyment of that eternal health, which never leaves him ; and gets fat in the midst of gallantries, while I am dusting folios with the Professor.

"Now I will step behind the curtain, that you may have the theatre entirely to yourself, and stretch your legs at leisure among the rocks and ruins of this historic land, enjoying the fruits of many a painful pilgrimage.

"The tomb of Theagenes, among the ruins of the city of Chersonesus, or Cherrsonesus, if you cavil with Strabo in your hand, was broken open, and ransacked by the Scythian troops, in seeking for building materials. I made the discovery by accident, seeing the marble that closed the mouth of the sepulchre among stones and mortar, destined for the repairs of the Greek church at Sebastopole. It is a beautiful bass-relief, representing a philosopher or historian, with a manuscript roll in his hand, and his wife by his side ; in the finest drapery of the Grecian sculpture. It was sold to me for a trifle ; but when the Scythian generals found I had obtained something which I valued, they again deprived me of it. I hoped to have placed it in the public library, with others, which I have sent before to Constantinople ; all I can do now is to send the inscription. Here you have it, date and all : *

ΘΕΑΓΕΝΗΣ ΧΡΗΣΤΙΩΝΟΣ ΚΑΙ
ΗΓΥΝΗΑΥΤΟΥ ΟΥΑΝΙΑ ΜΑ
ΚΑΡΙΑΕΤΩΝ ΖΕΚΝΒΧΑΙΡΕ

"Theagenes the historian was of Rhegium, and flourished in the fifth century before Christ, which does not agree with the date ; and therefore I leave to the sages of the Cam, to determine what Theagenes this may be. I have been deprived

* See Dr. Clarke's Travels, vol. i. p. 495.

of other bass-reliefs and inscriptions of more consequence, in the same way. What think you of an inscription made in the Crimea, in the time of Tiberius? beginning with these words—

ΒΑΣΙΛΕΥΟΝΤΟΣ ΒΑΣΙΛΕΩΣ ΤΙΒΕΡΙΟΥ

And now let the scene change—Whew!—away with inscriptions!

“The Crimea is almost untrodden ground for the antiquarian. History will gain force as it becomes explored. Strabo is more exact than Patterson’s Book of Roads. Modern geographers, who would illustrate the ancients, have attempted it in their closets. Some errors and some accuracy distinguish them all. A map of the antiquities of the Crimea was much wanted, and, with infinite labour, I have completed such a work, correcting the errors of predecessors, admitting their facts, and adding what was new. Let others, who come after, render my labour superfluous.

“Pallas is gone, for a few days, to his vineyards at Sudak. When he returns, we shall go over the Minor Peninsula again together. I made several discoveries, which were unknown to him; and we go to work among the ruins together, groping for inscriptions and plants. The last two volumes of the *Flora Russica* will be committed to my care. He cannot publish them in Russia. The drawings are all finished, and the letter-press wants but little addition. The engraving only remains to be executed. I have many plants not in Linnæus, and some never described by any botanist. Add also, coins, manuscripts, insects, animals, drawings, and such other acquisitions as are necessary to illustrate the ancient or modern history of the Crimea. Cripps makes a very useful journal, and has collected plants with uncommon care. I do not think any have escaped him. I assure you, I never had such a traveller. You will see some day what he can do, when in search of *phenomena*; nor do I believe you would change him for the best instructed companion with whom the University could supply you. This tribute is but due, for his long attentions and excellent conduct to me, and it is the more so in being strictly truth.

“The greatest mischief that geography could receive, originated in the ignorance and vanity of Potemkin, who, in attempting to give the different places in the Crimea their original names, falsely christened half of them, and made a confusion which it is difficult to remove. The principal object should be

to determine the site of Pantocapœum and Phanagoria. This, I hope, has been done by me ; and to an intimate friend, I may make this avowal ; because it never was done with any degree of accuracy before. Formalconi, Oderico, Count Potocki, have all rendered service to the cause ; but they never quitted their arm-chairs ; and Potocki himself acknowledges, that an ignorant man may do more on the spot, than a man of letters in his closet. The fact is, we have no maps. Examine the best atlas :—open D’Anville, or Vaugonde—what a place they have made of Kuban, and the country of the Don Cossacks ; and what confusion and error prevail on the shores of the Palus Mæotis, and the Pontus Euxinus !

“ The temple of Diana of the Tauride remains, at which Iphigenia was priestess. Take care how you approach it ! The goddess requires that her altars should be annually stained with the blood of a stranger. We found her shrine ; and without claiming any relationship to the daughter of Agamemnon escaped full as well as Orestes and Pylades. It is not so easy to ascertain the situation of the old Chersonesus, which Strabo mentions as in ruins. The other city of the same name is so great in its remains, that the portals were standing when the Scythians first began their favourite work of destruction after the conquest of the Crimea. Achilleum is found ; Namp hæum, Athenæon, Parthenium,—the tombs and palace of the Bosphorian kings : the limits of their empire at different periods, with the situation of Myrmecium and Apaturos ; all of which are determined for the first time ; for, before, you might as well have placed them in the Thames, as where they stood in the maps.

“ We sail for Constantinople, in fourteen days. A Turkish Brigantine, commanded by Osman Keers, lies for us at Kosloff. The storms in the Black Sea have been incessant. We have such bad luck by water, that we dread the voyage ; but the autumn is reckoned the most serene and favourable season. My whiskers already give me the look of a cat, as black as ink, and reaching from ear to ear. We shall be externally very genuine Turks in a short time, and the sun has qualified our skins for the true Mahometan tint. Perhaps I have already told you, I found a plant near the Don, a Campanula, with this remarkable distinction : the flowers of the Campanula were blue, with a calyx, but between every ramification and the stem there appeared a small white flower without a calyx ; the flowers of the Campanula being Pentandria Trigynia, and the white flowers Tetrandria Digynia. Pallas said, he had never seen nor heard of such an instance before.

"Aug. 28, morning.—He is returned, at this moment, with his carriage laden with the riches of his vineyards, on the south coast of this peninsula. I have therefore no time to add more."

To the same.

"ACHMEDCHID, capital of the Crimea,
September 25, 1800.

"Well, here I am, upon the eve of embarking for that long wished for spot, Constantinople! See how fair and plain I have written its name! you did not perhaps expect that you would receive another letter from the Tauride. We have lived two months with Professor Pallas, in his comfortable house and delightful company. Do not think I lost my time: I left my studies but to hear the harp, when his fair daughter of an evening sang hallelujah. Now for the Euxine! All our things are on board; we wait only the captain's call. This is truly a holyday for me; and it is the first I have enjoyed since I left England. My work is done—my journal complete—my cases packed—my health restored. Many things will induce a remembrance of the Crimea, which I cannot now mention. It has been an interesting country to both of us.

"I made a second visit to the Minor Peninsula of Chersonesus, accompanied by Professor Pallas, Mr. Galera of Genoa, and Cripps. We ransacked for plants and ruins. Of the first we have some, never heard of in England, nor ever known to Europe. Of the last, we had also satiety. We discovered not only the old Chersonese of Strabo; but the very temple of Diana, upon the promontory Parthenium.

"I have many papers of importance in my hands, and only tremble, fearing they may be lost on the Black Sea. If Cripps and the papers were safe, for my poor carcass, the dolphins may have it as soon as they please. The completing of the *Flora Russica* is entirely given to my care. The whole of Professor Pallas's Herbarium is at my disposal, and the genus *Astragalus* alone is as large as the collection of botany, entire, of common individuals, and this I take with me to Constantinople. The next—follows next spring. The genera, *Pedicularis*, *Veronica*, *Lychnis*, *Pyrola*, &c. are all equally complete. It has resulted from the study, labours, and voyages, of his life. You must not let my mother see this letter, because I have to tell you, that in case any accident happens in our passage across the Black Sea, I have instructed Pallas to write to Dr. Pearce, well knowing that you would not like to

receive a letter with such news ; when you hear we are safe at Constantinople, you may send her this, or any other letter of mine you think proper.

“ For literary news, I can tell you, that Professor Pallas is finishing his last work of travels, part of which has appeared at Leipsic, and the rest will be published next summer ; comprehending many interesting observations in the Crimea.

“ What he has given to us, and in how many articles we are indebted to him for instruction, I cannot enumerate. Tournefort's Travels, of such immense importance to a traveller in Greece, he has placed in our trunk. I have also a present from him to Sir Joseph Banks. He has furnished us with seeds of plants collected in Siberia, Persia, Thibet, Kamschatka, the American isles and continent, &c. &c.

“ Poor Tweddel lived here, as we have done, and profited by the same advantages. I have seen his letters, and some of his drawings. At Constantinople I hope to recover some of his manuscripts and papers. The artist who worked for him is very well known to our servant Antonio, a Turk, who lived with him till within a month of his death. Antonio speaks about eleven languages ; so you may imagine how serviceable he is, and will be, to us : at present, he cannot utter a syllable of English, which is still an advantage.

“ If you wish, in few words, to have an idea of the Crimea, —it is a sterile plain from Perecop till you come near the south coast, which consists of a barrier of high limestone mountains. The towns of Karasu, Basar, Achmedchid, Bachiserai, and Achtiar, form a line on the outside of them to the north. It is remarkable that a country containing so many interesting and even important objects should be so little known, and so rarely visited. There does not exist even a tolerable map of it.

“ The Minor Péninsula of Chersonese, comprehended within the isthmus, formed by the harbour of Balaclava, or Portus Symbolorum, and that of the Clenus, is full of antiquities. The most remarkable are, the grottos of Jukerman, the ruins of the new and old Chersonese, founded by the Heracleotes, the temple of Diana, the wall across the isthmus, with the various fortresses and tumuli of the Chersonesians.

“ Of new plants I can now only send you a few names. Centaurea Myriocephala, Melica Villosa, Salvia Hablixiana, Robinia Jubata, Rosa Pygmæa.

“ The climate of the Crimea is as much impregnated with Malaria, as the foulest marshes of Italy. Every body suffers the intermitting fever. If you take milk, a tertian. If eggs,

ditto. If butter, ditto. If you walk out in the evening, ditto. If you drink water after fruit, ditto, ditto, ditto.

"Pallas instructs us to look for the rarest and best plants, in sandy soil, on chalk hills, and in salt marsh. To dry specimens of the Sedum, or of Aloes, or any fleshy plants, steep them the first two or three days in brandy, and it succeeds to perfection. All Siberian, Lapland, and Arctic plants thrive best under bell glasses. Who could have suspected this? All aquatic plants may be raised in pots, containing a small quantity of mould, and afterward filled up with water. The Dutch have done this.

"I wish to go from Astarabat on the southern coast of the Caspian, with the caravan, to Multan, by the north of Persia, and up the Indus to Cashmir. The man who shall do this, will make important discoveries. He would traverse the highest part of Asia, on those wholesome mountains, where the human race was first planted. He would discover the original customs and dialects of the first men. Animals, plants, and minerals, unknown to the whole world, would result from his researches. I will give up ten more years to this plan, if you will make a party. Government shall lend us a hand, and if they will not, I can scrape together enough to buy potatoes and tea. Health may fade, even life may expire; but science will be thankful for our labours, and the moral critic candidly acknowledges we have not idly wasted this portion of our days. Will you believe that at Samarcand, in the territory of the Bocharian Tartars, there is a library of many thousand manuscripts, in Hebrew, Armenian, Coptic, Parthic, Chaldean, and other languages? I have conversed with Cephalonian spies, sent by the British Company in India to treat with the Afghans, the conquerors of the north of that vast district, which seems almost unknown. Countries half as large as Europe, become the seat of war or peace. Nations and empires are won or lost, and the refined part of the globe know nothing of it. Whatever we do, let us not sit still;—there's time enough for that when we lose the use of our legs.

"In the mean time, by way of a lounge, I have my eyes upon Anatolia. The cities of Amastria, Sinope, and Trebisond, would afford some curious inscriptions. Now as I know you would be gratified in receiving a note from Professor Pallas, I leave him to add a few words in his handwriting.

(The following is in Dr. Pallas's handwriting.)

Dr. Pallas is very sorry he had not the pleasure to see Mr. Otter in the Crimea along with Messrs. Clarke and Cripps; it

would have been an additional good fortune to make the acquaintance of a gentleman, of whose parts he was told so much good.'

"Tell Malthus we never neglect the thermometer. It has been observed without the exception of a single day since we parted from you. The greatest heat of the Crimea this year has been ninety-five of Fahrenheit's scale, or thirty-seven of our thermometer, which is on the scale of Celsius. The last winter, and the preceding one, in this country, were the severest they have ever felt. The thermometer fell to eighteen degrees below 0, of Reaumur's scale. Generally in the Crimea they have not above seven degrees of cold; and even that is astonishing in such a latitude. They freeze their wine here, to extract the water, and obtain the quintessence. The Tartars have an opinion, that since the Russians came, they brought their winter with them.

"My next will certainly be from Constantinople, if we survive the passage. The only cause of fear originates in the ignorance the Turks have, of navigating their strange vessels, and the heavy load they give them."

To his Mother.

"ODESSA, on the Black Sea, near the mouth
of the Danube. Oct. 30, 1800.

"At last I am enabled to write the true particulars of our situation in this execrable country; for as I shall not send this letter to England, till we are safe landed in Constantinople, it will not be subject to the inspection of the rascally Russian police, and, of course, a son may write to his parent, without being put in prison for his affection, or having his letter confiscated, for telling his situation. If you knew all we have suffered since we left the Swedish frontiers, you would not wonder in finding an oath in my letter; but perhaps feel disposed to add a good hearty one to mine. I have travelled ten years, and seen every part of Europe, except Spain and Portugal, but never met such injustice, villany, thieving, insult, and barbarity, as in Russia: what, is the name of an Englishman, think you, a protection here? Is Lord Granville's passport worth a rush? 'Free subjects of his Britannic Majesty, travelling under the protection of the British laws.' Those are fine-sounding words, but have no meaning among the Scythians. We

have been nothing better than prisoners of war in a country of savages, these last ten months. I suppose you know, that war was actually declared in Petersburg against the English. We were then in the Crimea. I knew not when to hope for an escape out of Russia. We have been trying to get to Constantinople ever since the month of June. At last, we have trumped up a sort of a passport, which has duped the hogs about the ports of the Black Sea, and now wait only for a wind. In the mean time, I shall get this letter ready to go to England, on the moment of our arrival, and when you receive it, you may be convinced we are snug and safe out of the trap. Of all the traps set to catch mice, none ever equalled the trap which this country offers to travellers. If you hear any one talk of coming here, tell them to jump into Newgate sooner than attempt to visit Russia. Times are altered. Catherine is dead ! The present emperor is both a fool and a madman, according as he is in good or bad humour. But the envoys keep all this matter secret, and the Russians take care no Englishman shall tell tales, as long as he remains in the country. You heard of their turning us adrift, without servants, in a forest, without interpreters or guides. But that is nothing to what we have suffered since. Thank God, their game is near the end ; and it will be our turn to play next. I cannot pretend to give you a catalogue of their pranks. The Russians treat travellers, as some children use flies ; cut off their wings, and put them in a box, among spiders, to be hunted.

" When we came to Petersburg, Sir Charles Whitworth applied for our servants. Paul was in a passion ; swore we should neither have our servants nor any others. The merchants were all packing up to get out of the country—free British merchants ! Paul swore not a man of them should stir. Petersburg soon became too hot for us. We were advised to make the best of our way to the southern frontiers, and cross into Turkey. Arrived in Moscow, Count Saltikow, the governor, refused to give us passports, either to go on or turn back. It was an even chance whether we should step into our carriage, or into a prison.—We looked at one another, patiently exclaiming, 'Wo is me, that I am constrained to dwell with Meshech, and to have my habitation among the tents of Kedar.'

" At last, we reached the Crimea ; having wandered a roundabout journey among the mountains of Caucasus, quite into Circassia, to be as much forgotten and out of the way as possible. No sooner landed in the Crimea, than our money failed, and we had not a sous left to buy bread. Our spirits

seemed to rise in proportion to our difficulties, and when bread and money failed, we imitated the Russians, and knocking down the first old hen we saw, stewed her into broth, and swallowed her poor old bones upon the spot.

"Luckily, just at this critical season, we met with the best of friends, Professor Pallas, to whom the late empress had given an estate in the Crimea, and who received us into his house, and was in benevolence a father to us. With him we remained the last summer, till we had arranged matters so as to enable us to quit the empire, I hope for ever.

"We left him about three weeks since, loaded with every present he and his family could stow into our carriage or trunks. Do not console yourself with the idea of his being a Russian! He is a German by birth; but in all virtues of hospitality, humanity, and the whole chapter of what men should be, a Samaritan. I tumbled into a couple of fevers; first into a tertian, then into a quartan. Cripps also failed, and had a fever; but it was only for Pallas to snap his fingers, and break half a dozen bottles, in searching for our physic, and we were well in a trice. I think I see him now, walking about with his Quassia and Quinquina. Mrs. Pallas used to say, his portrait should be taken, with a bottle of physic in one hand, and a box of pills in the other. I am sure, in whatever manner it is finished, it is a portrait you will admire, so I leave him just as he is.

"We were to have sailed from Kosloff, in the Crimea; but the vessel was overloaded, and we escaped and came to Odesa, and now you are as wise as before. This accident gave us additional delay, and a journey of five hundred miles into the bargain. We had decided to go by land, and sent to Lord Elgin, at Constantinople, for an escort of Janissaries, to meet us at Bender on the frontiers, and conduct us clear of the rebel army of the Pacha Paswan D'Oglou, who is in full force among the mountains of Bessarabia. Meeting here with an imperial brigantine, laden with corn, and bound for the Porte, with the first wind, we shall leave the Janissaries to cool their heels at Bender, and sail with the captain, a Venetian, Francesco Bergamini.

"I live but in the hopes of finding some news of you, at Constantinople. 'Of all places, my dear! who would think of going to Constantinople for news of me?' These are the very words! I heard you say them to Anne, looking over your spectacles. God bless you! if I could but just kiss the tip of your nose, I should expire in peace! 'What can he mean, Anne, by expiring?'

"I'll tell you! I'll pull off my coat, and waistcoat, and

reeches, but not my drawers, nor my stockings, on account of the bugs, nor my jerkin, on account of the lice. Then I place myself in a horizontal position, as nearly as I can, upon a species of four-posted bier, such as they kill hogs upon in England, and after the accustomed signals of distress, commit myself nocturnally to that kind of torture, which the Russians all repose ; and if this is not expiring, tell me what is ?

“The last intelligence I obtained from Uckfield—God knows how ! but by one of the lucky chances which baffle mortal men, followed me to Moscow, and arrived just as I was leaving the place. It was contained in a letter from Anne. Since that letter, all is dark and silent—a horrid intervention of non-consciousness, from which an enemy would wish to deliver me. It is true I told you to direct your letters to Vienna ; but I have written one since, to beg for a line of light and information, to Constantinople. It is impossible to conjecture what the Russians may have done with that, or any other of my letters ; or to what inexpressible purpose it may have been appropriated. If you have received it, I shall be comforted—not, God help me !

“You will have full time to write to me at Constantinople, and, from the lateness of the season, we shall not leave that place till the spring. You wonder why we are not now in England, according to our plans and promises. You must come to Russia to learn the true cause of our delay ; and when you have travelled through this empire, you will raise your eyes in astonishment, to find we are so much advanced in our journey.

“Your letters must be addressed, ‘aux soins de Messrs. Barbaud et Co., Constantinople.’ If it should happen that we have left the place, proper directions will be given, that your letter may follow me. But as we are both eager to collect the plants of this country, on the opening of the spring, it is not probable that we shall have left Constantinople till your letter arrives. Enclose in another cover a letter of recommendation from Mr. Crawley to any house in Smyrna. I remember once he gave me a letter to a lady there ; but as I did not go, the letter was returned.

“One night, in the Crimea, a gentleman, a native of Smyrna, Colonel Durant, gave us lodgings in his house. What was my surprise, to find in him the cousin and namesake of Mr. Crawley. Ask Mr. Crawley if he knows him. He served in the Russian army, under Prince Potemkin, and was in high favour with that Arch Scythian.

“Pray tell Otter and George Stracey to write a letter to Constantinople to us. There is no kindness which is felt more

sensibly, than a letter from England, when one is so far removed. Tell my dear brother George, that I do not write to him, because I consider a letter sent to you, as common to the whole house. But I hope he will have the goodness to send me a few lines.

P.S. November the 2d. From the cabin of our ship, at night.—The favourable weather we enjoy upon these fearful waters, enables me to take up my pen, which I have seldom been able to do at sea. We are now in the midst of our voyage, and have been three days on board; such delightful sailing, the ship hardly appears in motion, and yet with heavy lading she is now going at the rate of six knots an hour.

“We have just passed the mouths of the Danube, and the Isle of Serpents, on which once stood a temple of Achilles, so sacred, that the aisles of it were regularly visited at the setting sun, by white swans, who came to sprinkle water on its altars with their dripping wings. White dolphins play around its shores.

“I had formed high ideas of the mouths of the Danube, and expected to see Neptune in all his pomp, greeting the arrival of the river nymphs. My gaudy pageant sunk into nothing! a flat, muddy shore, with a wide bed of reeds! But the quantity of water which the Danube, in a very ungentle and underhand way, conveys into the Black Sea, is amazing. It covers the sea with a white colour for ten leagues, and creates a current which we profit by at this instant, and which is to continue to the canal of Constantinople. Within three leagues of the mouths of the river, the water is fresh, and within one league, it may be drunk by the crews of ships passing.

“Good night! I must now go and walk on the deck; for we have a full moon, and other ships being in company, render the scene too pleasing to be neglected by sitting here to describe it.

“P.S.—November 15th, 1800.—Still at sea. When I am able to give an account of our landing, I shall feel more comfortable than I do now.

“What we have seen and suffered, since I wrote the last paragraph, will please more round a fire than in a letter. We had finished our voyage, having arrived off the mouth of the canal of Constantinople, on the morning of November the 5th. A calm prevented us from going in; but we had even the houses in view and thought to arrive before noon. A hurricane succeeded the calm, and we danced beyond description;

being blown for nights and days, out of all calculation. At last we got into a little port in Turkey, and here we wait a favourable change. I have copied the log-book of the ship, that George may see what sort of business a ship's crew has in a hurricane. We have now been sixteen days at sea, for a passage usually performed in four, and it is very uncertain when we may end our imprisonment. Once more, good night! The ship rolls too much to add more. Only be assured of this, when you get this letter, we shall be, please God, safe and well.

"P. S.—Nov. 21st. Canal of Constantinople.—Rejoice with me, all of you! On this day we effected our escape from the Black Sea. We experienced another dreadful storm, and now lie snug within the canal."

To the Rev. William Otter:

CONSTANTINOPLE, Dec. 24, 1800.

"I could wish my head was in a better state to answer the long acceptable letter I have received. But the courier is going, and if I lose this opportunity, it may be some time before another occurs. Your letter is dated November the 3d; and it is the only one I have received from you, since you went to England. Indeed, I have had very few letters from any of my friends. If you send the books you have collected, respecting the Trojan controversy, they will be more acceptable than you can imagine. We have not here even pens or paper. Constantinople with regard to literature is worse than Kuban Tartary.

"If you have seen my last letter to Uckfield, you will know what danger we escaped in leaving the Black Sea. Half the vessels that sailed in company with us, are lost in the passage from Odessa. I cannot now tell you the horror we endured. An extract from the ship's log-book will better do this at a future period. But you will have some idea of it when I state, that we sailed in four days to the mouth of the canal of Constantinople, within sight of the light-house, and having carelessly lost the opportunity of getting in, were caught in a hurricane, which I believe has been more or less felt all over Europe, and contended during twenty-four days with the fury of a sea, in comparison of which, the Biscayan billows, and

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the roll of the Atlantic, might be deemed safety and repose. In reflecting upon those dangers, or in beholding them, my heart neither now, nor then, would have sunk so much, had it not been attended with a consciousness that Cripps, from the goodness of his heart, was brought into danger on my account. At the same time, he is himself a perfect stranger to fear of any kind, nor ever betrays the slightest alarm even when death stares him in the face.

"My mother will not be pleased to hear, that she may again direct letters to Constantinople. We cannot stir from this place till we have an answer from England; for by the mismanagement of Cripps's friends, we have not received a letter of credit he wrote for to enable us to return. You will, therefore, tell my friends to write to me, as before, and I hope to hear, above all, from you. God knows, when we may get home. The state of public affairs is very unpromising.

"We are now all in consternation in consequence of an application made by Monsieur Jamana, the Russian minister here, demanding a positive declaration, from the Porte, either for peace or war with England. As things now appear, we may be all in the Seven Towers, in seven days, and give up our lodgings to the French prisoners there, while we occupy their quarters.

"By the papers, I see that George has sailed, and I live in the hope to see him in the Archipelago. It is now near ten years since we met. An American frigate leaves this place on Saturday, and the Captain, with a letter from me to him, promises to hunt his ship throughout the Mediterranean, and will probably find him in Malta.

"Thank God we are at length free from Russia, though not clear of its influence! Long before any embargo was laid on British property, we knew of a Russian frigate cruising in the Black Sea, with orders to capture any English vessel that might be found to have passed the canal. You have no idea of the internal state of that country at this moment. The list of prohibitions and proscriptions is so voluminous, that a man has only sufficient leisure to sit at home and study them; for it is impossible to venture out without a trespass, and spies are at every corner. The works of Pallas being printed at Leipsic, were sent to him in proof sheets for correction. Even these were confiscated, and so there is an end of all Pallas's works. What genuine Scythians! While I was in Russia, I could not tell you what I shall now relate, and you will rejoice with me in the news. Pallas acted as a father to me."

To the same.

CONSTANTINOPLE, Jan. 20, 1801.

"My quartan fever with frequent return has prevented me lately, when I wished to tell you, with what impatience we wait your answer to our last. The books you mention, more precious than the gold of Ophir, never came. The Turkish fête of Ramadan is begun, and all the minarets in Constantinople are illuminated. I have seen every thing worth notice here; and wish to move, for change of air and scenery. Yesterday, the ceremony of celebrating the Queen's birthday, drew all the English to the British palace. It was high gala: Lord Elgin gave a magnificent ball and supper. Cripps, in full uniform, with plumes and whiskers, displayed the activity of a Scotch reel, to all the motly tribe of Greeks, Armenians, Turks, Arabs, French, Germans, Italians, Russians, Swedes, Prussians, and the rest of the list. We have here pretty girls, and balls without end. If you could peep in, you would see me shaking with ague, affecting youth and gayety, whirling Lady Elgin in all the fury of 'Money Musk,' 'Drops of Brandy,' and 'Jenny dang the Weaver.' You know how fond I am of dancing; alas! in either shoe I feel the weight of those years, that have intervened between my dancing pumps, and my travelling hose. Now, some little skipper says—'You seem fatigued, Mr. Clarke!' How garrulous it would be to reply—'Once I knew not fatigue.' No, I take my hat silently and walk home, and then my mortification is complete, when some Euphrosyne exclaims, 'What, don't you dance after supper?'"

"You will wish to know what my serious occupations are: It is not the season for plants; though some bloom here all the year through. I have collected many of the most interesting Greek medals; it is instructive to possess medals of the countries one has particularly visited or studied. An artist, who was celebrated in Rome, is forming drawings for me, of such things, as are most worth notice in Greece, and even in Constantinople. As I have been admitted to places where never Frank before had placed his foot, I have endeavoured to gratify others. Of these are, the interior of the Seraglio, the Haram, or apartments, and palace of the Sultanas, &c."

"I cannot promise much for my journal of Constantinople; because I do not choose to copy what others have said before, and there is nothing to add to their labours. But it is pleasant to know that no such journal is wanting. Of all the cities in Europe, not excepting London, there is no one so well known by the works which have been written to describe it as Con-

stantinople; of this a remarkable proof occurs in Gibbon, who, without visiting it, wrote the best description extant, by the works which had previously appeared. In fact, all has been done. Its antiquities suffer no change, and Turkish manners and opinions, like Egyptian obelisks, stand through ages the same.

"The late publication of Dallaway I would particularly recommend to you. It is in every respect the best topographical work I ever read, and I have given it fair trial, by examining the description with the objects described; at the same time, written with such interesting brevity, that its perusal is never tiresome. Every syllable he says, whether on places or manners, is worth your notice. He gives you the clear and simple truth, without *verbiage* or parade. The prints would disgrace Velz's booth at Pot Fair. It is a pity they were admitted in a work of such character.

"Now for the Troade, which seems to interest you so much; and, by the beard of Mahomet! I know not how 'twill end. Lord Elgin has lent me the publications you mention; I have read them with some attention, but not having been on the spot, have no opinion of my own to offer. Tweddell was decidedly against Bryant, and with the Trojans, which is intelligence of weight with you; and I have it from the authority of those who examined his papers. One point seems never to have been noticed by either party. Might not Homer, whose birth-place is so undecided, have passed his earliest years, so as to have the most accurate knowledge of that country, and to have accommodated a fiction to scenery with which he was familiar; as did Virgil and Ovid, respecting the Lake Avernus, and the Caves of Cuma; the promontory of Misenum, and the Gulf of Gaïeta?

"Thus his poems may accurately coincide with all the existing phenomena of the Troade, without granting the necessity of the existence of such a city. This is merely the idea of the moment, as I write. Very soon I will go, to make, at least, such inquiries as may satisfy your mind respecting the former; as for the latter, it may ever be a point beyond my power to decide. Respecting the accurate agreement of the geography of Homer, with the present plain of Troy, we have few skeptics here. Those who know most of the matter, find it answers perfectly well. The antiquities which interest me most here, are the three brazen serpents, which supported the tripod of Xerxes, in the temple of Delphi. Gibbon says of it, 'The guardians of the most holy relics would rejoice if they were able to produce such a chain of evidence, as may be alleged on this occasion.' At the bottom of one

of the obelisks in the Hippodrome, is also a bass-relief, representing that circus, as it was at the time those pillars were erected. As this has been hitherto disregarded, I shall have an accurate drawing made from it, which will tell more than a volume of description.

"I am in hourly expectation of hearing of my brother's arrival at Rhodes: 18,000 men are there in good health, and the rest daily expected. If he come, I shall prevail on him to take us to Egypt, to see the army make their *debut*. A great levy of horses and provisions is making here, and over Asia Minor. The English will find plenty of work, for the French are no fools, and their position is not a bad one."

To the Rev. William Otter.

"SOURCE of the SIMOIS, on Mount Ida,
below Gargarus. March 11, 1801.

"Judge of my rapture! Enabled to date a letter to you, at the very source of the Simois. You will read with pleasure, and I write with joy. Enterprise has subdued all! I have health in all its vigour. My ague I left at Constantinople. Here I sit with Cripps on a spot that never traveller witnessed since the first Christians made these wilds their refuge, surrounded by scenery more sublime than Salvator Rosa ever conceived or viewed. Yesterday my life, which always hangs by a thread, had nearly fallen on the peak of Gargarus. Deserted by all, even by my guides, and compelled from the great danger and horror of the scene to leave Cripps on its third summit, I climbed the glaciers, which cover the aerial top of Ida—drove Paris from his judgment-seat, and drank brandy with the Queen of Love, in view of Olympus. The hundred things I have to tell you will find vent, I hope when I get back to the base of the mountain: I now borrow our artist's pencil, to write that the Source of the Simois, object of years of hope, is before my eyes!"

RHODES, April 3, 1801.

"The base of the mountain, you see, has extended to Rhodes. I was overcome with fatigue, which brought on my fever, and the long letter I intended to write, must dwindle to nothing: I am once more restored to health, and, having traced with a pen the lines I pencilled at the Source of the

Simois, will endeavour to recollect some of the things I wished to tell you.

"We waited at Constantinople for news of you, till the plague drove us off; and the Captain Pacha having fitted up a corvette to take me to my brother, on the coast of Egypt, I hastened to join the British armament.

"I wish to tell you of my acquisitions in Constantinople, but they are all swallowed up in the riches of our Trojan expedition. One thing only I will mention, as it has been considered a very important and singular discovery. I slept not for many nights after I got possession of it. There are poor Turks in Constantinople whose business it is, to wash the mud of the common sewers of the city, and the sand of the shore. These people found a small onyx, with an antique intaglio, of most excellent workmanship, representing Æneas flying from the city, leading his boy by the hand, and bearing on his shoulders (whom do you suppose?)—not his father; for in that case, the subject might have been borrowed from Virgil or Ovid, but—his wife, with the Penates in her lap; and so wonderfully wrought, that these three figures are brought into a gem of the smallest size, and wings are added to the feet of Æneas,

'Fœdibus timor addidit alas!'

to express by symbols the most explicit nature of the story, and the situation of the hero.

"Thus, you see, it is proved that a tradition (founded neither on the works of Homer, nor the Greek historians; and perhaps unknown to Virgil and the Roman poets, who always borrowed their stories from such records as were afforded by the works of ancient artists) existed among the ancients in the remotest periods, respecting the war of Troy. The authenticity of this invaluable little relic, the light it throws on ancient history, its beauty, and the remarkable coincidence of the spot on which it was found, with the locality of the subject it illustrates, interested so much the late Swedish minister, Mr. Heidensham, and other antiquarians of the first talents in this part of the world, that I have given it a very considerable part of this letter; hoping it will not be indifferent to you. I will be guilty of no other ostentation respecting my Greek medals, than to add, if you can find in Comb's Catalogue of Hunter's coins, or Pinkerton, any medal described as unique, that medal I will show you on my return.

"As for our expedition to the Plain of Troy, and the Source of the Simois, which you so much recommended to me, and is

the course of which I used the greatest care and industry, I hope the result of it will entitle us to your approbation. I really know not how to express the pleasure and satisfaction it afforded me. Our success exceeded all that has hitherto attended our travels ; and if, with the facts which I could offer, any doubt can remain respecting the authenticity of Homer's poems, or their application in the strictest sense to the geography of the country we traversed, a much worse principle than want of information must actuate the minds of those who affect skepticism with petulance, and maintain error with obstinacy. I suffered, at first, from the want of the books you promised me, and even for thinking of them I am thankful to you. By dint of severe application, I copied all that was necessary, from all that has been written, borrowing here and there, and at length I was armed as I could wish to be, in an undertaking recommended by you, and which I should never have had the courage to encounter, but at your instigation. You will always acquit me of prejudice, by the letter I sent to you on this subject after my arrival in Constantinople. It is no more than plain honesty to say, that whatever opinion a man may form in his closet, on this side of old Jacob,* it will be annihilated by the evidence the country offers. In reading Chevalier and his followers, you would think they had been groping about in the dark, collecting with infinite care and difficulty, a small portion of very doubtful evidence. These are the first persons you would censure upon arriving in the plain of Troy.

"It offers every fact you want ; there is nothing doubtful. No argument will stand an instant in opposition to the test of inquiry on the spot ; penetrating into the mountains behind the Acropolis, the proofs grow more numerous as you advance, till at length the discussion becomes absurd, and the nonsense of Bryantism so ridiculous, that his warmest partisans would be ashamed to acknowledge they had ever assented for an instant, to such contemptible blasphemy upon the most sacred records of history.

"We set out upon this expedition with two of the first artists in Europe. Lusieri of Naples, whom you have heard me name ; and Preaux, who was brought from the Academy of Paris, by the Duc de Choiseul. By their means we obtained forty drawings of the most interesting parts of our journey, and enjoyed the society of men of genius and taste, more enthusiastic perhaps even than you could be, surrounded by such objects. We formed a troop of twelve horsemen, and spent

* Bryant,

fourteen days in the most incessant research, traversing the plain of Troy in all directions, measuring and making plans, and copying inscriptions, and drawing. Ten days more we remained at the Dardanelles, putting our materials in order, comparing, correcting, and sending messengers for what we left behind. The Pacha of the Dardanelles gave me the free command of his *chicous*, to bring away whatever we thought proper—so we have for the Public Library, pillars from the plain of Troy, whose inscriptions, of whatever date, will be sufficient to prove that the wisest and most refined nations of antiquity did not expect that a retired priest, in a remote island of the northern seas, would have the temerity to oppose his dreams to their testimony.

"You are eager for me to enter upon more important matter—to give you proof positive, and so forth. How am I to do all this now? I will tell you a few facts.

"1.—Lectum is the promontory of a chain of mountains of which Gargarus, now called Kasdaghi, is the summit.

"2.—The Simois rises from the western side of Gargarus (Kasdaghi,) falling from Ida.

"3.—The sources of the Scamander have still the character of being one hot and the other cold. Estimated by the thermometer, they are both hot, though the source, in one part, is more accessible than in the other.

"4.—Xerxes, marching from Antandros to Abydos, of necessity, had Gargarus on his left hand.

"5.—Gargarus overlooked the city and plains of Troy.

"6.—The distance from Buonarbachi to the Hellespont is seven miles and three-fourths.

"7.—The tomb of Ilus is close to the mound of the plain. The tomb of Myrinna I found also.

"8.—The walls of the lower city ran beneath the hill of wild fig-trees, so as to expose it to an enemy on that side.

"9.—The Acropolis is impregnable, but by stratagem. It is covered with ruins. The Grecian horse, thrown from its precipices, would have been dashed to atoms, and hurled into the Simois.

"10.—When the Simois is swollen by floods, it carries all before it.

"11.—The plain is sufficiently spacious for the events related by Homer. It is much larger than the plain of Marathon.

"12.—The soil is fertile in the highest degree.

"13.—The plants mentioned by Homer, are the plants peculiar to the Kirk Ghios, or Scamander.

"14.—Udjek Tepe, or the tomb of Æsytetes, lies in the

road leading from New Ilium (Strabo) to Alexandria Troas. It is the only spot which a spy sent from Troy could choose to survey unobserved the naval station of the Greeks. He could regain the city by speed : because his pursuers must cross the Scamander, and ascend a steep ridge to follow him.

" 15.—From Gargarus to the point of Lectum, the mountains, gradually falling, form by their tops a series like a flight of steps. Thus Juno is made to land at Lectum, in order to ascend to Gargarus.

" 16.—The temple of Jupiter the Deliverer, is on a platform below Gargarus. It seems to have furnished mineral baths for the cure of diseases.

" 17.—The distance from Gargarus to Lectum is thirty miles.

" 18.—The tomb of Hector has been opened ; it is constructed of stones.

" 19.—The ruins of the temple of Apollo Thymbrius, are like a forest of pillars. The place is now called Thymbreck. The mouth of the Simois is called Mander, or Menders.

" 20.—The place to which Æneas retreated in the mountains is called Æné.

" 21.—At the season of the year, in which we were there, the old channel of the Scamander is full, the whole way to the junction with the Simois.

" 22.—Ulysses hid himself among the reeds, and rushes, at the sources of the Scamander. At this day, he might repeat the stratagem, and lie safe from discovery, if a whole army were after him.

" 23.—The plain of Troy has been thought a desert, without any traces of cities or ruins. It is a museum of antiquities ; so many are not found in any part of Greece. I speak of the ruins at Thymbreck, at Tehiblack, at Calafat, at New Ilium, at the sources of the Scamander, at Buonarbachi, at Erkessi, at Sigeum, at Alexandria Troas. But travellers have been accustomed to pass a day in its examination, whereas a quarter of a year might be well spent in the employment. And what is the reason that among these ruins are always found the granite shafts of Doric pillars decomposed by time ; which has taken place in no other ruins in the known world, and it is known that granite will resist the action of the atmosphere during a series of ages ? Are we not to answer, that these pillars were works of a remoter date, brought from other ruins to serve in the construction of those edifices, from which they have a second and a third time fallen to decay.

" 24.—The walls of the Acropolis of Troy still remain. It was called Priam's lofty citadel, and had the epithet of windy,

from its situation. There is not a point of the compass from which a wind can blow, without whistling against its walls.

"25.—Tenedos is in view, both from the lower city and the Acropolis.

'Est in conspectu Tenedos.'

"I will not proceed now, as the letter would have no end. But I will call your attention to one of the most remarkable facts that the subject can offer. It is said, the Trojans were encamped close to the tomb of Ilus, and the mound of the plain, and that in this encampment they were not in view of the naval station of the Greeks. If I find such a peculiar coincidence, as a plain, a mound, and a tomb, at a certain distance from the junction of two rivers, having now the character and the name assigned them formerly: if these are not in view of a camp stationed at this mound and tomb, what do I want more? The description answers to evidence existing and indisputable.

"But the word mound is remarkable, and one must see the mound of the plain to comprehend all its force and accuracy. In the plain of Troy, as flat as Romney marsh, rises a long mound of limestone, at one extremity of which is a tomb, and they form two such remarkable objects, that you would never name one without the other; but would say, 'At the mound and the tomb,' 'at the tomb of Ilus,' and 'the mound of the plain.'

"And I will venture to say, the whole world does not offer another instance of a plain in which nature and art have combined to afford a mound and a tomb so situated. Because they are not common objects. The mound itself is a sort of *lusus nature*, and they both prove that Homer's description applies to them only, and his having detailed a feature so remarkable, proves that his picture is a portrait, and not a work of fancy.

"The medals found at the ruins of the temple of Jupiter the Deliverer, are the most ancient in the world. They answer to those placed among the Nummi Incerti of Hunter's Museum. A dissertation upon them, has been written by the famous Eckel of Vienna.

"I have no time to give you an account of our voyage through the Archipelago. We visited the Isle of Cos, and I have reason to think the library of Patmos contains valuable manuscripts. I saw a curious one of the *Odyssey*, in the hands of a Greek, but he would not sell it.

"I am on the eve of sailing for Aboukir, which you know is taken. Perhaps they have not told you in England, that

our victories have cost no less than one-fourth of the whole British army. We have lost five thousand men. Some of the wounded are brought here. Lieutenant Leicester and seventy soldiers were buried here yesterday evening. I have conversed with some of the soldiers, and they say, a spectacle more horrible than the landing of the troops was never seen. Unfavourable weather had kept the English ten days in sight before they could land. So the French had all the time they wished to make every preparation, and began to think the English were making a feint. When the regiments attempted to land, the storm of shot, sand, &c. which fell upon them was so great, that they fell like locusts. The boats were filled with dead men and blood. The French cavalry charged even at the boats, riding into the sea, and cutting down our men, with their horses' heads in the very boats. Such bravery as was evinced by both sides, is without parallel. A party of only two hundred French cavalry had the astonishing audacity to charge the whole British army. They were every one cut to pieces. At length the 42d regiment formed on the shore, and instantly charged the enemy, running up the hill most gallantly. The French were then soon repulsed. The landing was badly managed: They did not get to shore till ten in the morning, instead of landing in the night. And in one action we had no artillery, when the French guns were mowing down our troops.

"The news of the capture of Alexandria is expected here every hour, which will finish the affair."——

In consequence of the loss of a part of Mr. Clarke's correspondence, which ought to appear in this place, it has been thought necessary to give a short account of his proceedings, in the interval between his departure from Rhodes to his arrival at Jerusalem. From Rhodes the travellers passed over to the Gulf of Glaucus (now Macri,) on the coast of Asia Minor, where Mr. Clarke wrote to the author of this Memoir an account (now lost) of the Ruins of Telmessus. Thence they sailed for Egypt, and joined the English fleet on the 16th of April, in Aboukir Bay, where he found his brother, Captain George Clarke, in the command of the Brankel. Under his guidance they landed to view the position of the English fleet, before Alexandria, and having afterward made a journey by land to Rosetta, they returned to the fleet for their baggage, and then took up their quarters in an agreeable house in Ro-

setta, which they hired for some time. After a stay of about a fortnight, however, in Rosetta, they were tempted by Capt. Russell, of the *Ceres* frigate, to embark with him for Cyprus. At this place, Mr. Clarke wrote a few lines to his mother, which will appear. On the 22d of June, they returned to the Braakel, in Aboukir Bay, (Captain Russel having died of a fever in the passage,) and two days after they sailed with Captain Culverhouse, of the *Romulus*, for Acre, to which place the frigate had been ordered for a supply of bullocks, for the fleet. Here Mr. Clarke wrote another letter, no longer extant, to the same friend, containing many interesting particulars respecting Djezzar Pacha and his government; and thence, under the protection of an escort from this extraordinary man, they travelled to Jerusalem, where the next letter is dated.

To his Mother.

"CYPRUS, June 7, 1801.
Ceres frigate, Captain Russell.

"A few lines are better than none. George is at Rosetta, in Egypt; and we are rambling about this island. The map will show you the distance of sea that separates us; but a frigate makes no more of walking over to Cyprus, than you do to go to Lidbetter's for tape. In a few days I hope to be with him again. I came here by way of filling up the time which must elapse before the English have taken Cairo, and then return to George; who is in our comfortable house, looking out of the window at his cutter, which lies in the Nile below. I hope to get a little Cyprus wine, to hoist it into his ship, and make caudle for Anne. We were offered this trip, and you will allow the temptation was great.

"The death of the Emperor Paul saves me all my property in Russia; and, I assure you, I hung my head when I heard all our cases were confiscated."

To the Rev. William Otter.

"JERUSALEM, July 10, 1801.
 Convent of St. Salvador.

"The date!—the date's the thing! You will thank me for a letter dated *Jerusalem*, more for that little local honour stuck

in its front, than for all the fine composition and intelligence it may contain. I hardly yet feel the reality of my being here, and when I reflect, and look back on the many years in which I vainly hoped for this happiness; on the difficulties and dangers I have encountered to get here; on my fatigue, and fevers, and toil; I am ready to sink beneath the weight of an accomplishment, possessing so much influence on my life. For all my hopes centred there—all my plans—speculations—wishes—were concerned in travels; and without visiting Egypt, Syria, and Greece, my travels, however extensive, would have appeared to me to want that nucleus, which, like the heart, is necessary to give life and sensation to the body. If I could repose a little, I should now, I think, be found more quiet for my future life. A stillness must succeed to the gratification of desires which have so long irritated my mind and body. I have done my portion, and am satisfied. If I sit down in Old England's meadows, I may hope to listen no more to schemes of enterprise, but leave it to younger and stronger men to visit those regions, which I have no longer the wish nor the power to explore.

"Do not fear that I shall give you a new edition of old Sandys, or Maundrell, or Rauwolff. I came not here in an age of credulity, though sufficiently an enthusiast. But what blind or wilful ignorance has caused the Christians of this place, through several ages, to show a spot as the house of Dives, and another of the Samaritan? converting the parables of our Saviour to realities, and giving the lie to the Gospels. It matters not—there are antiquities of the highest character around the city. We have been falsely taught to believe, that nothing was to be seen here but monks, and monasteries, and relics, and pilgrims, and ignorance, and folly. It is not true! Jerusalem is, of all the cities in the east, one of the most interesting to which a historic traveller can resort for information. Leaving apart the common mummery which occupies its daily visitants; there is enough yet untouched and undescribed, to bring pilgrims of a very different description from the universities of Europe, to pursue the most important inquiries. If you find that what I shall write is new, and worthy your attention, it will prove what might be discovered here by men, having more time and better talents. To me it appears as though the eyes of former travellers had been entirely shut upon their coming here; or that they were so occupied by the monks and their stories, that they neglected to go out of the walls.

"To those interested in evangelical history, no spectacle can be more mortifying than Jerusalem in its present state. The mistaken zeal of early Christians in their attempts to pre-

serve, has, for the most part, annihilated those testimonies, which might have remained at this day to establish the authenticity of the Gospel; and for which such expense and danger were encountered. Their labours are only calculated to excite regret, if not indignation; and, sighing over the havoc made by the pious hands of the crusaders, of the Empress Helena and Godfrey of Boulogne, you would lament that the Holy Land was ever rescued from the hands of Saracens, far less barbarous than their conquerors.

————— ‘*Quanto præstantius esset
Numen aque viridi si margine clauderet undas
Herba, nec ingenuum violarent marmora tophum.*’

“The absurdity of hewing the rocks of Mount Calvary into gilded chapels, and disguising the Holy Sepulchre by coverings of marble and painted domes, has so effectually removed or concealed all that might have borne witness to the history of the Crucifixion, that a visit to Jerusalem has often weakened, instead of fortifying the faith of pilgrims; many of whom have returned worse Christians than they came. This may be the case with those who seek for guidance in the works and relations of ignorant monks; but Jerusalem will be no source of incredulity to men, who, with the Gospel in their hands, and a proper attention to history, tread over the ground, shutting their ears, and opening their eyes.

“More pleasing is the prospect from the summit of Mount Olivet, Mount Sion, or the insulated top of Thabor, in the plains of Esdraelon. Thence, all Judea is presented to your view; and such confirmation of the accuracy of the Scriptures, that the earliest records to which history can refer, appear the most authentic. The wild Arab, journeying with his immense family, with his camels, his oxen, his mules, and his asses, is still the picture of patriarchal manners. Customs that were thought peculiar to people who have disappeared in the lapse of ages, characterize, at this moment, the inhabitants of the same countries. Novelty, so adored in Europe, has few charms in Asia. The same habits are transmitted invariably from father to son. A thousand years may pass away, and future travellers find the descendants of Abraham watering their camels by the well of Nahor, while another Rebecca, with the daughters of the men of the city, come down, with pitchers on their shoulders, and draw water from the well; wearing ear-rings of half a shekel weight, and bracelets ten shekels weight of gold. Visiting their tents, we will find a second Sarah, kneading three measures of fine meal, to make cakes upon the hearth, and to offer it for his refreshment be-

neath a tree, in the plain of Mamre ; while Amraphel king of Shinar, Arioch king of Ellasar, Chedorlaomer king of Elam, and Tidal king of nations, are at war with Bera king of Sodom, and with Birsha king of Gomorrah, Shinab king of Admah, and Shemeber king of Zeboim, and the king of Belar, which is Zoar. Such wars were raging as we passed from Jerusalem to Joppa ; and we once saw a circle of such kings and princes, seated on the ground, holding council, whether we should be smitten, as were the Rephaims in Ashteroth Karnaim, and the Horites in Mount Seir.

“ But the antiquities to which I particularly wish to call your attention, I found in descending from Mount Sion to the valley of Jehoshaphat. I forget, whether in my letter to you, describing the antiquities in the Gulf of Glaucus, I mentioned some remarkable sepulchres hewn in the rocks there, and which I said so exactly answered the description given of the tomb of Jesus Christ, that I was convinced could I visit Jerusalem, I should find similar antiquities there. Having visited the sepulchre, supposed to have been that of Christ, I was not satisfied with its appearance. It is now so disguised with marble, that no one can judge from its appearance of its original state. I found no rock in which it seemed to have been hewn, but its sides were of that sort of marble called verd-antique ; and all the rocks of Jerusalem are a very hard limestone. Add to this, it is only forty paces distant from the spot on which they pretend the cross stood ; and almost on a level with it, both being beneath the roof of the same church. Finding it difficult to reconcile the topography of modern Jerusalem, and the situation of the places shown there, with its ancient history, I began to extend my researches without the walls. Coming down from the gate of Mount Sion, I perceived the sides of the opposite hill perforated by sepulchres, exactly resembling those among the ruins of Telmessus, in the Gulf of Glaucus, and fulfilling my prediction most completely. One of these, facing Mount Sion, so exactly corresponds with the description of the sepulchre of our Saviour, that you would be at once disposed to pronounce the hill on which it has been cut, Mount Calvary, and this, or at least one of the other tombs, the precise place in which his body was laid. It is hewn in the rock. To look into it, it is necessary to stoop down.’ (See St. John, chap. xx. 5.) The stone, which filled its mouth, was of such size, that it could only be rolled to its place, and when once there, would have astonished any person to find it had been removed. (Mark, chap. xvi. 3.) It is natural to suppose, that a hill for the execution of malefactors, would be placed as this is, out of the walls of the city. But

there is a stronger reason to suppose the body of Jesus was placed there, and that exactly upon this mount, and no other, Joseph of Arimathea, would construct his tomb. It is this—that from time immemorial the Karaean Jews (a sect of all others, the most correct in the observance of ancient ceremonies, and whose traditions, extending to the remotest periods, are the least corrupted) have been accustomed to bring their dead for interment to this mount. They bury them there at this hour, but having no longer the power to execute such prodigious works of art, are contented to cover the bodies of their relations with more simple works. The present inhabitants of Jerusalem know nothing more of the place; and though one of the most wonderful works of art which can be found, despise it for two reasons:

“1st.—Because it has not been considered among the number of the holy places.

“2d.—Because it is the Jewish cemetery.

“However, that it was once entitled to more respect, I shall prove, by giving you the Greek inscription which I found on this tomb, and on others, cut above, below, or on one side of the mouths of the sepulchres, in large characters, on the face of the rock.

ΤΗC ΑΓΙΑC CΙΩΝ

“I can easily imagine how much this inscription will interest you, by the emotions I felt in discovering it. You will perceive the Sigma, is not written according to the old Greek character, σ; but as in the lower ages, C. I have been much accustomed to antiquities, and I know that these sepulchres are coeval with the Crucifixion; and perhaps many of them prior to it. Some of them have inscriptions in Hebrew of greater length, and others in a character which is perhaps unknown. I leave you to make more of it than I could do. I can only observe, that the most ancient method of writing the Greek Omicron was by a square, thus, □, as all ancient characters were angular, before mankind had learned the more difficult method of tracing curvilineals. ς is, I believe, the Greek φ, and the π is evident of itself.

47↑7-----

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ΟΙ7|ΠΠX

ΠX↑↑7|

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ΣΥ7~ΠΟΠΝΤX°ΔΛΓ

ΟΠ7ΟΟΠΠΟΠΠ7°ΣΣ

"The two strongest arguments to prove that the sepulchre of Christ was one of these, is, that Joseph of Arimathea, being a Jew, must necessarily have constructed his tomb in the Jewish cemetery; and secondly, to prove that this was the place of burial of the ancient Jews, it is sufficient to have shown, that the Kargan, a sect the most obstinate in adhering to ancient customs, have, beyond memory, buried their dead there. It is on the south side of the city, facing Mount Sion.

"These discussions are no otherwise of moment, than as they serve to show, that the writers of the Gospels, in the most minute circumstances, respecting the manners of the age whose events they celebrate, have been entirely exact. It is for the same reason, that I beheld with very great satisfaction, from our windows in Nazareth, two women grinding at the mill, exactly as mentioned by our Saviour; and the machine they used for this purpose, is the most ancient mill of which we have any knowledge; it is the same as the *quern* of the Scottish Highlands. I have seen it also in Lapland, and in the Isle of Cyprus—countries sufficiently in their primeval state, to afford the first view of those arts which are called forth by the necessities of life.

"The Druses are a people inhabiting Mount Lebanon, with whom our patron and preserver, the Pacha of Acre, is at war. We were escorted by his guards from Mount Carmel, over all Galilee, to Nazareth and Jerusalem, and narrowly escaped falling into the hands of the Arabs established on Mount Thabor. I had an opportunity to converse with some of the Druses, near the Lake of Gennesareth. They are the most ex-

traordinary people on earth; singular in the simplicity of their lives, by their strict integrity and virtue. They will only eat what they earn by their own labour, and preserve at this moment the superstitions brought by the Israelites out of Egypt. What will your surprise be to learn, that every Thursday they elevate the molten calf, before which they prostrate themselves, and having paid their adoration, each man selects among the women present the wife he likes the best, with whom the ceremony ends. The calf is of gold, silver, or bronze. This is exactly that worship, at which Moses was so incensed, in descending from Mount Sinai. The cow was the Venus of the Egyptians, and of course the calf, a personification of animal desire, or Cupid, before which the sacrifices so offensive to Moses were held. For it is related, that they set up a molten calf, which Aaron had made from the golden ear-rings of the Israelite women; before which similar sacrifices were made. And certainly the Druses on Mount Lebanon, are a detachment of the posterity of those Israelites, who are so often represented in Scripture, as deserters from the true faith, falling back into the old superstitions and pagan worship of the country from whence they came. I could not visit Mount Lebanon; but I took every method necessary to ascertain the truth of this relation; and I send it to you as one of the highest antiquities, and most curious relics of remote ages, which has yet been found upon earth.

“From the mountains near Bethlehem, the Dead Sea, with the river Jordan, appeared as if I could walk down to it in two hours. It is a most extraordinary place. I shall show you, I hope, some of its productions. The plants were almost all withered, and the heat of the sun so great, that it threw me into one of my fevers—which alarmed us, as the plague raged both in Nazareth and Bethlehem, and it began with such symptoms as are usually deemed pestilential. I have recovered in this convent, among the fattest friars who ever fed on the milk and honey of Canaan. You will imagine what sufferings accompany travels in such climates, where one looks in vain for shade; where the wind is hotter than the sun’s rays; and where Fahrenheit’s thermometer, not being exposed to either, rises to 105. Lord Keith told me, that in the tents of the English, near Cairo, it had risen to 120. An umbrella is but a mockery of wo, for the reflected heat from the ground is full as insupportable, as the direct rays of the sun.

“Besides the antiquities I have mentioned to you, on the south side of the city, Jerusalem is entirely surrounded with others, which bear no features to indicate in what age, or by whom they were left. They are for the most part of the same

character ; and consist of subterranean excavations, of a magnitude and beauty, without parallel. They are not like the catacombs at Naples or Rome, though the greatest part of them appear sepulchral. In riding without the walls of the city, sometimes a small aperture like the mouth of a well, at others, the whole side of a rock, cut like a quarry, with wide openings, beautifully sculptured and adorned with columns, lead to numberless chambers of different dimensions, all hewn in the solid rock, where you may wander as in a labyrinth, and find no end to your research. The most considerable of them are the only ones to which the inhabitants have given even a name ; and they are, the Sepulchre of the Virgin Mary, and all her family, of the Saints Joachim, Anne, and Joseph ; and some prodigious excavations, on the north side of Jerusalem, called the Sepulchres of its ancient kings. I can form no conjecture respecting their origin, but have found them all over the Holy Land, as well as on the coast of Asia Minor. Even on the summit of the Mount of Olives are some of these subterranean works ; and one there, in particular, is deserving of notice, as it differs from all the rest in being lined with a very hard antique stucco, similar to some subterranean works which I found on the Isle of Bequieres, in the bay of Aboukir, on the coast of Egypt. It is also of a very remarkable form ; being a cone, or funnel, whose vertex rising to the surface of the summit of the mountain, affords a small opening to admit light, as well as the only entrance ; below this hole, the sides of the cone extend to such a width and depth, that I could not determine the immense size of the cavern they contained.

“I cannot conclude this letter, already swelled to a volume (which convinces me of the impossibility of writing half I wish to add,) without mentioning our travels in Galilee, by much the most pleasing part of our journey. I know of no travellers who have visited that portion of the Holy Land, as it lies out of the usual pilgrimage of persons bound merely to Jerusalem. Our plan was to pursue the history of Jesus Christ, from his nativity to his death ; following his footsteps, with the Gospel in our hands, and reading at every spot mentioned in it, the passage which had rendered it sacred. For this purpose we went first to Nazareth from thence into Galilee, visiting Cana, the Lake of Gennesareth, and even the borders of the Desert, to which he retired in his earliest years. Galilee affords the highest satisfaction, because its objects are among the features of nature, and are not liable to receive injury from the barbarous zeal of the monks. The scenery there is very grand. The Lake of Gennesareth, or Sea of Tiberias, is

more beautiful than the Lake of Locarno, which it resembles ; at the same time, it has that grandeur which is ever found where water of such extent is surrounded by high mountains ; and hardly yields the palm to the Lake of Geneva. I had the happiness of swimming in its crystal waters ; buoyed above its waves by all those emotions, which local enthusiasm, when called forth by piety as well as memory, in scenery so dignified, cannot fail to excite.

"Returning from Galilee we took a road by Mount Thabor ; passing through the country, in which his disciples are said to have plucked the ears of corn on the sabbath-day, and came again to Cana and to Nazareth. At Cana we saw, still in use, those 'stone water-pots,' which are described (John, chap. ii. v. 6.) as containing 'two or three firkins a-piece.'" We then crossed the beautiful plain of Erzelon, or Esdraelon, more fertile than the richest gardens ; in the midst of which Mount Thabor rises insulated to a great height, of a conic form, and offers a retreat to the wildest bands of Arab robbers. The cavalry of the Pacha of Acre were encamped in this plain, and they received us into their tents, feeding us after the eastern custom, all out of one dish, seated on the ground, and teaching us to eat pilau and sour milk with our fingers. They afterwards escorted us to a fortress in the mountains, under the government of the Pacha of Damascus, our train consisting of thirty-three armed men on horseback ; while our Arabs kept skirmishing, practising all those feats of horsemanship, for which they are so celebrated ; firing their pieces, and engaging in sham fights round us, that the distant enemy might not count our numbers, nor be able to survey our strength.

"Some of the princes of the robbers, Arab chiefs, such as were of old time shepherd kings, came down from the mountains, to enter into a league with the general of the cavalry in the plain, and dined by our side, beneath the same tent ; but would not eat out of the same dish. The Arabs then encamped had already taken from some of the neighbouring tribes 20,000 oxen, 12,000 camels, 10,000 sheep, 8,000 asses ; besides horses, prisoners, arms, &c. One hundred of the oxen have been given to the captain of our frigate, Captain Culverhouse of the *Romulus*, to take back to the fleet at Aboukir.

"The whole country is a continued succession of hills and plains. The former are cultivated to their tops, with uncommon industry, and covered with olive and fig-trees. The plains produce the richest harvests, except in the perturbed dominions of the Pacha of Acre. Nazareth alone seems to preserve its old character of wretchedness and sterility. The hills around being a bleak incorrigible rock ; and its inhabitants in the

greatest poverty ; so that one would still exclaim, ' Can any thing good come out of Nazareth ? ' Of the Holy Land, in general, the valley watered by the Jordan, and the rich plains of Canaan, it is still but truth to style it, ' a land flowing with milk and honey.' The eye ranges over an extent of corn, wine, oil, rice, tobacco, figs, melons, and whatever the earth can yield, to fill the granaries of men, or gratify their palates. Among these are seen swarms of partridges, wild deer, wild boars, which hardly move at your approach ; while the stately camel, moving with dignified step, in the long caravans, bearing wealth and power, lifts his tall head above the harvest, and seems with his eye to command immeasurable distance. — Such is the Holy Land, or rather such the only account I can now give you. Since I wrote last to you, I have visited Cyprus, being conveyed there in the Ceres frigate, Captain Russell. I have no time now to enter upon the subject of that island. I had hardly been two days back to the fleet, when the Captain of the Romulus offered us a passage to Acre. These are favourable moments for travellers in the Levant, when frigates are daily sailing in all directions, and the English name is so much respected. I can tell you nothing of affairs in Egypt till I get back ; but believe things are much as they were when I sent you my last letter. Cripps unites in remembrance. God bless you.

" I must beg of you to let my mother see this letter, and also G. Stracey, if you have an opportunity, as you will see the impossibility of writing to all friends, in the midst of such fatigue and occupation."

To his Mother.

JERUSALEM, July 10, 1801.

" You who know what my disappointment was, some years ago, when Lord Berwick altered his intention of visiting Egypt and the Holy Land, will be able to judge of my transports in arriving here. It has proved one of the happiest journeys of my life. We have travelled over all Galilee, and in Judea, and are finally come to join in thanksgiving and in prayer, on that spot whence all the blessings of religion were derived. Here, on this holy ground, we call to mind the dangers from which we have been preserved, and the friends from whom we are separated ; and cold must be that piety which, so incited, neglects a vow of gratitude for the one, and a zealous

supplication for the other. My letters to you necessarily demand other intelligence than the story of our travels ; even Jerusalem, interesting as it is, in its antiquities and local celebrity, will not call for your attention, so much as the welfare of your children, and the news of their destiny. It is for this reason, I have written to Otter what most interested me ; and I hasten in this letter, to include what will be of more importance to you.

"I have much to say, particularly on the subject of our dear George ; respecting whose health I have the happiest accounts to give. He is, what I never before saw him, all health, activity, spirit, industry, gayety, strength, prudence. But we had an awful business. The rheumatism was cured but one of those disorders, from which few escape in this country, brought him to an alarming crisis. He came on board his ship from Rosetta, with such a dreadful bowel complaint, the consequence of the climate, and of the medicines he had been forced to use, that we thought we should have lost him. Great care, and his iron constitution, with God's blessing, have saved him, and he has risen from his illness entirely a new man. All his complaints are gone ; he is getting fat, and is gone to Marseilles to carry home the French prisoners, and to complete all, by breathing the fine air of that place. He is altered in every thing—even in his sentiments ; and considers what has past, for a long time back, so much like a dream, that he does not remember many circumstances.

"Aboukir Bay, August 6th.—You will never understand my letters, if I do not tell you they are all patch-work. I add a line when I can. I was called off after the first paragraph at Jerusalem, and the rest is added since.

"I got back to the fleet just time enough to see George before he sailed for Marseilles. We had a happy evening together, and then the French prisoners swarmed in, and filled the Braakel, like a bee-hive. He has a General, with his wife and child, in his cabin. We sailed with him half a day, till we were out of sight of the fleet. He had not a moment to himself, but was quite happy in all the bustle, and in getting to sea, having the chief command of eleven ships in company with him. He charged me to write to you.

"We are now on board the Ceres, Captain Russell. We went to Acre in the Romulus : Captain Larmour, of the Diamond, brought us from the Braakel, back to the fleet.

"I hope now, in little more than a fortnight, to give you an account of our progress towards Uckfield. You have never given me your sentiments on the request I made to you re-

my marriage ; and you need not be alarmed, for I am
 an indifferent how it ends. I shall pass that way in
 a day, and before that your letter must arrive.

Now I have to tell you, that when we have seen the
 day, which is what we are now upon—All is done ! Then

we have no more vagaries nor excursions : but we shall
 go in a straight line home ; before this month ends, we

hope, be advanced on our journey to England ; and
 now with what velocity we travel, when once we set out

on our lines. Whether I come home double or single, a Darby
 and Gribble, you will find me in one respect the same,

Your ever dutiful Son."

To the Rev. William Otter.

" Au Quartier General du Caire, le 20 Thermidor,
 l'an premier de la Consternation Française !

Your last letter, dated March 21st, was as grateful as you
 wish it to be ; and though you say nothing material has
 happened, and that you have nothing to communicate but little
 news, you have lived enough abroad to feel the necessity of
 communication. A letter from England is to us the ob-
 long and often vain hope, and, whatever it may be,
 arrives without the warmest welcome. Among so many

who sit at ease by your tables, we know that a letter
 comes and then is written. When we undertake to write,
 we have to persevere against fatigue, and the want of the
 common materials. No stationers expose their wares in
 the busy lanes of Cairo. At this moment, half naked, and
 to the very bones, with one hand I drive away clouds
 and stinging insects, while the other labours for you.

Your letter you say Malthus sent, never came ; nor have I
 any thing of the books on the Troade.

When I ask for a little political information, I thought I had
 your *Combination appetites* in a former volume. Were
 I not, you would soon cry, 'Où j'am satis est !' and re-

join the few parties we have, to discuss matters of
 public interest. But as it is otherwise, I will enact the
 part, to as much purpose as the intelligence I have to
 communicate will allow. I was at Jerusalem when Cairo
 was besieged ; therefore could not witness the tears of the
 deposed sultanas, nor state their destiny to you.—At pre-
 sent people are staring at each other in astonishment, at the

terms which were granted to the French, who marched away more like victors than vanquished. They left nothing moveable behind them, except the unfortunate and beautiful girls, whom they had ravished from the harems of the murdered beys; and whom, in the true spirit of French gallantry, they deserted when no longer necessary; giving them over to the rude, though perhaps more humane, embraces of the soldiers and sailors in the British camp.—

“I cannot give you any idea when Alexandria may fall; perhaps to-morrow; perhaps a month hence. An immense force is before it, and it has been long blockaded. But that madman, Menou, is there, and who knows what he will endure or do. An aid-de-camp came from him the other day to Lord Keith, when I was sitting with his Lordship and General Hutchinson, in the cabin of the *Foudroyant*. He stayed all night, and returned by daylight, but nothing of moment transpired. It is known that they are in the greatest extremity. They have rice in abundance; but neither wine, oil, butter, nor bread: and a Frenchman cannot live on boiled rice. Add to this, their want of water, and its bad quality. The Indian army here has orders to march, and the Albanese troops of the Vizier's army are sent for, who are generally used in storming; so that we expect an assault to be made. If the place is attacked, we have an offer to go on board Sir Sidney Smith's ship, to witness the storm. I believe I told you my brother is gone to Marseilles with the liberated French. He convoys nine cartels, frigates and transports. I went to sea with him, and meeting the *Diadem*, Captain Larmour, returned to the fleet. The Prince of Wales has written to Lord Keith, to desire he may be placed in a more active ship. He has on board five hundred and sixty French troops, with about fifty officers, and General le Grange, with his Georgian damsel, occupies a part of his cabin. About fourteen thousand persons, French and refugees, are sent to France from Cairo.

“We have now a house in Cairo. The inundation of the Nile has taken place, and the canal was opened with great rejoicings a few days ago. We are entirely occupied in parties of pleasure; going about in our barge as at Venice. Every body is our friend. The commanders of the army and the navy seem to strive who shall show us the most attention, or contribute most to forward our plans. Colonel Stewart lends us horses and dragoons to visit the pyramids. Colonel Holloway, commandant of Cairo, does the same for the ruins on this side the river; and offers to get any thing away for me, which I may find. General Baird invited us to his sumptuous entertainments in the Indian camp. They are on the Isle of

Rouda. The Reis Effendi, the Vizier, the Capudan Pacha, Lord Keith, General Hutchinson, Sir Sidney Smith, Colonel Paget, and most of the Captains of the fleet, have been eager to do us all the service in their power. It makes our stay here so pleasing, that you will not wonder it has been prolonged.

“The Indian army under General Baird forms one of the finest military sights in this country. Their establishment is quite in the style of oriental splendour. I know not how it will answer to mix them with the other English troops; as their pay is so much higher. Even the subalterns repose on sofas, beneath fine tents, drinking Madeira and English beer; while the richest of the troops from England sleep on the sand, and have none of those luxuries. Their voyage down the Nile was charming. They came, some of them, from the cataracts; and all of them visited the temples of Dendera, &c.; teaching those dastard savages, who have so often insulted and reviled travellers, to bow down, and tremble at the British standard, and to respect its name. They have with them persons of almost every caste in India. And it is a fact which will interest, if not astonish you, that upon my asking General Baird, whether the system adopted by Monsieur de Guignes was true, respecting the analogy between the Egyptians and the Chinese?—he replied, that some seapoys of the Brahmin caste, entering the Temple of Isis, acknowledged their god Vishnu among the mutilated idols; and would have destroyed the Arabs, for the injuries which these sacred symbols had sustained. No fact has occurred this century more worthy the attention of the historian. I am perfectly of opinion that the Chinese are an Egyptian colony, and that part of India was peopled in the same way. Therefore, their pretensions to antiquity are rightly founded; and we are not to wonder that the two first dynasties of the Chinese annals, are precisely the same with those of the kings of Thebes. If you were here, we should both be ruined; we should instantly proceed through Upper Egypt to India. I am half afraid to hint at such a project, for you will take the alarm, and suppose me already gone there. Never was there such an opportunity! Posts of British troops, at different distances, occupy the whole extent of the Nile, from hence to the cataracts. Ships from Bombay, floating palaces, are waiting to waft any traveller to the Ganges. I have been pressed much to go, and have been promised a passage home in a frigate, by the Cape of Good Hope. At the same time, vessels are sailing to all parts of the Red Sea and Mediterranean, and we receive daily invitations to distant shores. Will you not give

me then your approbation, if, having a friend who would go the world over with me, and better health than I have yet enjoyed, I listen to the dictates of duty and prudence, and determine to proceed from hence straight to Old England ; to convey him safe to the arms of his longing parents, and to check rather than encourage that passion for enterprise, which perhaps I have noticed with too much satisfaction. If I ever desired to visit Upper Egypt ; if, when difficulty and danger awaited the undertaking, I would have sacrificed every interest and every tie, to tread that historic soil, what must I now feel in turning back, when my foot, as it were, rests upon the threshold of a building, which contains the long-sought talisman. If I were free from my present engagement, and master of my own actions, I should deem it a disgrace ; now it becomes a duty. While I have life, I would proceed ; and grow gray in the pursuit of knowledge, leaving you to smile at the inconsistency with which, in my letter from Jerusalem, I told you I had done enough, when I am now raving to do more.

"I hope I have made every inquiry that you would have dictated about Bruce, the Abyssinian traveller. There is no doubt, as to his having visited that country. The Imperial consul here knew and travelled with him. It is not long since a man died in Cairo, who accompanied him from that country ; and used to confirm all that Bruce had written, by his relation. The officers from India affirm, that, in all the countries which they visited, they found Bruce a most faithful writer ; and General Baird adds, that his latitudes of places in the Red Sea, are the only observations to be depended upon ; and that they were of great use to the fleet. I believe his work will rise in estimation, in proportion as the memory of the man is obliterated.

"To-morrow we are going, under an escort of Janissaries, to Heliopolis. I neglect my journal in deference to the French savans ; in the hope that nothing has escaped their active research. All Europe looks to them for abundance of discovery and refutation of error. By what we learn here, there is reason to fear the usual result *de l'accouchement des montagnes*. They seem like *chevaux de ménage*, to have kicked up a great deal of dust, without gaining any ground.

"I understand that ——— is at Malta, on his way to England. Hamilton, Lord Elgin's secretary, who was always our good friend, is here, as agent for the Ambassador. ———'s long search after the original manuscript of the *Arabian Nights*, was made in vain. And it would not surprise me if he was gone home on that account a skeptic to its existence. The French savans searched for it all the time they spent in this

country: and an Arab student from Vienna has orders to find it if possible. What will you say, if after all these staunch pointers have ranged the stubble, such a pug-dog as I should start the game, and bear it home to my masters? Toe-ho! you exclaim, and level your piece—bang!!!—we have it, snug—the whole work complete—all that has, and that has not been translated. ‘One Thousand and One Nights;’ or, as it is nominated in Arabic, ‘Elf Leela, O Leela.’ So you may tell your Arabic professors to prepare—it is no less than four large volumes in quarto. I had searched for it all over Syria, Phœnicia, and Palestine; and at last found, I believe, the only copy, among the persons who prepare and bind the copies of the Koran in this immense city.

“I regret more than I can express, the inattention I have paid to Arabic. Had I known how much time I should pass among the Arabs, I might have made great proficiency in a language which I foresee will soon be foremost in classical studies. The authors, whose works may be deemed of importance in Arabic and Persian, are more numerous than Volney, and other writers, would have us suppose. Those languages are now taught to Philologists in Vienna, as the first necessary in their education, and will soon be prevalent in Europe.

“I wish I had time to say a few words on the antiquities I have seen. The Pyramids far, very far, surpass all I had imagined. They are every where in view, and form such features in the landscape here, as no design, engraving, or description, has yet represented. At the distance from which we now view them, they appear close to the eye. Without hyperbole they are immense mountains; and when clouds cast shadows over their white sides, they are seen passing as upon the summits of the Alps. We have procured and opened the embalmed bodies of the Ibis, those birds held sacred by the Egyptians. They seem to me to be storks; the same you saw held in such veneration in Denmark, and which, more or less, have been objects of religious respect in all ages, and in all countries.

“I do not agree with Volney on the subject of the plague; which in Egypt, I have no doubt, is indigenous. It originates in the stagnant waters left by the Nile; and all stagnant waters in hot climates produce disorders which have more or less resemblance to it. Is not this fact sufficient to prove that it rises in Egypt: viz. that when the inundation is great the plague ensues; when it is small, the plague fails? Without interfering course with Egypt, they have no plague in Constantinople. Its progress is from the south.

“Tell Malthus, I will never write to him till he has epis-

tolised me. Neither will I give either of you credit for letters which do not arrive. You are both shamefully in my debt, and will run up bills beyond what you will pay, if I do not have recourse to violent measures. If they have not heard lately from me at Uckfield, I shall be obliged to you, to communicate any letters, or any part of their contents, which you may think proper, to my mother and sister; both of whom, please God, I hope now soon to see. I am looking forward to the moment of our meeting, which, if possible, will be before the ice sets in between Hamburgh and Yarmouth; or else, as soon as the Elbe opens in the spring. Strange matrimonial events may hasten or protract the day. Should I be silly enough to bring home a *rib*, it may be in the spring.

“If you have not heard of the surrender of Alexandria before this letter arrives, you may expect some very important intelligence from this country every day. At present, a report prevails, and is much credited, though I believe it originates in the Jacobin party in Egypt, that the French, with a very large force, are at sea; and will certainly attempt a landing. Our forces are very much concentrated near Alexandria; and perhaps the country is a little too much left open towards Damietta and the east. The inhabitants of this place are in the greatest alarm in the fear of the English quitting Egypt, in which case most horrible massacre and plunder would certainly ensue from the Turks. They are ripe for insult and mischief; and in great chagrin that they were not permitted to sack Cairo. They rob wherever they can; and, the other day, shot a Frank, as he was sitting in his balcony, who now lies wounded in the room below ours. They wished to bastinado Cripps and me, because we would not descend from our balcony as the aga of the Janissaries passed by on horseback.

“Think how rejoiced we were in the change which has taken place in Russia. We know something of the present emperor. All our treasures of Siberian minerals we thought were lost for ever. But now we hear the embargo is taken off. Professor Pallas will repair his lost vigour, ‘and breathe and walk again’ amidst the fields of science he had abandoned. All Russia will rejoice—from the forts of Kamschatka to the forests of Poland. I hope my next will be dated nearer to England. Medals are exceedingly scarce here. I have only a few of the Ptolemies. Indeed, nothing abounds except dust, mosquitoes, bugs, and lice.”

To the Rev. George Stracey.

"Pinnacle of the Pyramid of *CHEROPS*; being the highest and largest of those of *Djiza*.—August 22, 1801; Ten o'clock, A. M. Thermometer of Celsius, estimated in the shade, 29 degrees above 0.

"Dear Stracey.—Here I am! looking down upon the Delta, and the—I know not what—pyramids, plains, canals, camps, boats, palm-trees, mosques, minarets. How my brain swims, and my heart distends! Alas! the giddiness of the one, almost prohibits my fulfilling the dictates of the other.

"You will easily imagine I have now attained the pinnacle of my wishes. In communicating to you the success which has accompanied my labours, they are fully accomplished. It is a promise I have long made you, that if ever I attained this eminence, and placed my feet upon this august eternal pile, I would hail you even on the spot.

"How we shall ramble and chatter when we meet. No street in London will be wide enough for our discussions. We

* * * * *

"Well, what do you think of our journey? The territory we have traversed comprehends so large a portion of the globe, that if we would visit the cataracts, which are within a few days of us, and which we are much pressed to do, we should have encountered the climates of the frigid, temperate, and torrid zones, and breathed every species of atmosphere, which hangs about the earth. We have been eastward as far as the longitude of Madagascar, and southward to the deserts of *Sagûara*. Our travels, since we parted, comprehend $38\frac{1}{2}$ degrees of latitude, and not less than 50 of longitude, a square upon the sphere so extensive, that if we were to sail home hence by the straits of Gibraltar we should not transgress its limits.

"Political intelligence you have from other quarters, therefore I cannot spare a line for it."

"*ASOUKIR BAY*, Sept. 8, 1801.

"We returned to this place yesterday from Rosetta. The English troops enter Alexandria to-morrow, and we accompany them.

"In our voyage down the Nile, I had the satisfaction to discover the ruins of the city of *Sais*, in the Delta; which I have not yet heard the French mention. The accuracy of

D'Anville guided me to the spot, and I have brought thence many curious antiquities.

"I have conversed with inhabitants of Abyssinia, who confirm all that Bruce has said in his travels. Indeed, you would be astonished at his accuracy.

"But what will be your pleasure to hear, that after all the researches of the French to find the original MSS. of the Arabian Nights, and also the futile inquiries of _____, and the German orientalists, I procured it in Cairo, in four volumes quarto. Mr. Hammer, the celebrated oriental scholar, will go to England, as he says, on purpose to translate it, and I have given him letters to Otter, &c. I have not an instant more.

"Your sincere friend."

To the Rev. Robt. Tyrwhit.

"Pinnacle of the Pyramid of Cuzors; being the highest and largest of those of Djiza.—August 22, 1801; Ten o'clock A. M. Thermometer of Celsius, estimated in the shade, 29 degrees above 0.

"If you find my pen wandering, or my paper blotted, you will not complain, when you perceive the giddy height on which I now stand. I have often wished to write to you; but the letters of a mere traveller are too frivolous to compensate even the tax they bear at such remote distances. To convince you, however, that a step to the clouds has not obliterated the remembrance of a duty I feel owing to you; the few minutes I have to spare here, are at your service.

"We have many thanks to render to the French for their labours in the plains below. They have left memorials among the Pyramids, which our army will not remove. The small Pyramid is more than half open, and the Sphinx, so long veiled in heaps of sand, at length exposes to common eyes her leonine posteriors.

"The Pyramids of Saccara, in Upper Egypt, at this moment in view, will be the *ne plus ultra* of our travels. As soon as we have seen them, and examined the catacombs containing the mummies, we shall turn our faces in good earnest towards Cambridge; where we hope to meet you in health and spirits.

I reserve for moments of more tranquillity the conclusion of this letter. Many voices call me off to assist in determining,

what perhaps will baffle our calculation, namely the long disputed height of this Pyramid.

“GRAND CAIRO, September 1, 1801.

“Vain are my wishes to write as I would wish. All is bustle and confusion. Alexandria has capitulated, and we are obliged to hasten our departure from this place, that we may make our entrance into that city with the English troops. The French are allowed ten days to settle their affairs, when they will take their final leave of Egypt. The brother of General Hutchinson arrived here with this intelligence from the army, which he carries to the Vizier. We had heard a flying report before from some Turkish soldiers. It is said, Menou was so unexpectedly daunted by the entrance of the English ships into port, that he affected not to give credit to the news, and when they told him the English were actually there, he replied, ‘It is impossible!’

“The English have used such expedition, that six regiments embarked, as soon as the treaty was signed, leaving Egypt even before the French. They are gone to Sicily, or Portugal; but it is believed to Sicily, to which place, it is said, our whole force will now be directed. General Baird remains with the Indian army to garrison Egypt.

“We have collected many things here. Among others, some Coptic and Abyssinian manuscripts.

“I have had opportunity to converse with an inhabitant of Abyssinia; the result of which conversation proves beyond doubt, that Bruce’s writings are not only correct as to the observance of truth, but that few travellers have written with more veracity than he has done. This subject I will reserve for a winter’s evening.

To R. Malthus, Esq.

“ABOUKIR BAY, September 8, 1801.

—“To-morrow, two hours before day-light, we boat it as far as the camp, and then boot it to Alexandria (quel superbe jeu de mots !) to make the grand entry with the army into the city. The English are to relieve the French guard at all the posts; and Cripps and I intend to relieve some of the French tenanted lodgings within the walls, by seizing the quarters they evacuate.

“Have the goodness to let Otter see my letter, to save me

the time necessary for writing two. Do me the favour to consider me as returning home ! It is a kindness I have not yet been able to show myself. Our ultimatum may be fixed at the Catacombs of Saecara, in Upper Egypt. We feel the attraction of Alma Mater, bringing us back like comets, in a very eccentric ellipse, to gather new force from the sun ; and dart off again.

"How glad I should be, if I could tease and torment you with new systems, and the reveries of my nightcap. I left some scavans at Cairo in high discussion upon a theory born in Cyprus, matured in Palestine, and turned loose in Egypt ; respecting the formation of atmosphere, by a process natural to the earth. I am ready to keep an act against you all, that the atmosphere was not coeval with the creation of the globe, but a necessary consequence. And to put no bounds to my vanity and temerity, I engage to prove, that Light is the fluid matter of Heat in its quiescent state. To compress it in as few words as possible, that light is caloric ; prevailing, but not pervading. At present, I merely confide this fact, with true parental fondness, to your care ; lest hereafter any cuckolded philosopher, in these days of crim. con. should pretend to father my bantling.

"Brown the Ammonian, is bound upon a second expedition to the Oasis. He has been seen at Rhodes, and is daily expected here. There is reason to suspect from what is said here, that the Arabs cheated him ; and that he never reached that country in his first journey.

"The Oasis Minor is as easily visited from Cairo, as Edinburgh from Cambridge. It is only five days' ride from Faioum, on the Lake Mæris. Alas ! when talking of such things, I could wish you to consider me in any light but that of returning. There are three Oases, instead of two. That sought after by Brown, is fifteen days' journey, in the desert, westward of Alexandria.

"You are to give full credit to Bruce. We put him to a severer trial than travellers in such remote countries have experienced. General Baird brought his work from India, and I opened it in the presence of a native of Abyssinia and several English, for two days successively ; examining the Abyssinian on all points. He knew the plants, and named them from the plates alone, and in all things strictly confirmed what Bruce had written. All the French travellers in Upper Egypt give praise and credit to his work ; as do the captains of the ships in the Red Sea, and the officers of the Indian army, who were as far up the Nile as the Cataracts. Indeed it is a

most valuable acquisition. He is not only accurate in general facts, but in all the minute circumstances deduced from them.

"I shall bring home the 'Decade Egyptienne,' the 'Courier de l'Egypte,' with most of the papers published by the French in Cairo. They will be very amusing, if they do not more highly interest you. If you have not yet seen the 'Memoirs of the National Institute at Paris,' endeavour to get them. The work is in five volumes, quarto; but contains much curious and new research, mingled with the usual frivolity and petitesse of the French. We have taken it here in the French prizes, and perhaps I shall be able to procure a copy. It has already been lent to me by a gentleman of Smyrna.

"We go to Athens from Alexandria, and from Athens to Constantinople. I hope to be in England in the winter. Egypt is to be garrisoned by the Indian army under General Baird. Never was there a moment so advantageous for visiting this country: formerly it was at the hazard of life to venture, after a few plants, a mile from the coast. Now all is open and safe.

"A new expedition is on foot, and it is said, to Corfu. Many of the ships are already ordered there with troops. Tomorrow all Egypt will be in the hands of the English. The Grand Vizier is with his army, and Colonel Halloway, at Cairo. We were twice presented to him, and received the embroidered handkerchief usually given on such occasions."

To the Rev. William Otter.

"ALEXANDRIA, September 14th, 1801.

"As I have sent a long letter to Malthus, which you will see, it is not necessary to write much now. We are here in the hands of the French. I thought the English would have entered days ago; but the tri-colour is still flying, and will continue so for a short time. Two regiments will march out, to embark at Aboukir, after midnight, and the rest will follow as fast as the vessels can be got ready for them. Great dispute has arisen between Generals Hutchinson and Menou, about the antiquities and collections of Natural History made by the corps of scavans. Menou has threatened him with all the effects of his fury; says he will publish him as a thief to all Europe, and finally that he will fight him on his return.

"I was at Cairo when the capitulation began. There I learned from the Imperial consul, that the famous inscription

which is to explain the Hieroglyphics, was still at Alexandria. I then intended to write to General Hutchinson and Lord Keith on that subject, to beg it might be obtained for the University of Cambridge, or the British Museum, as I know full well, we have better Orientalists than the French, and a knowledge of eastern languages may be necessary in some degree towards the developement of these inscriptions. News arrived in the instant of the cessation of hostilities, and I set out in haste to Alexandria. When I arrived in the British camp, General Hutchinson informed me, that he had already stipulated for the stone in question; and asked me, whether I thought the other literary treasures were sufficiently national, to be included in his demands. You may be sure I urged all the arguments I could muster to justify the proceeding; and it is clear that they are not private property. General Hutchinson sent me in to Menou, and charged me to discover what national property of that kind was in the hands of the French. Hamilton, Lord Elgin's secretary, had gone in the same morning, about an hour before, with Colonel Turner of the Antiquarian Society, about the Hieroglyphic Table. I showed my pass at the gates, and was admitted. The streets and public places were filled with the French troops, in desperate bad humour. Our proposals were made known, and backed with a menace from the British General, that he would break the capitulation, if the proposals were not acceded to. The whole corps of scavans and engineers beset Menou, and the poor old fellow, what with us, and them, was completely hunted. We have been now at this work, since Thursday the 11th, and I believe have succeeded. We found much more in their possession than was represented or imagined. Pointers would not range better for game, than we have done for Statues, Sarcophagi, Maps, MSS., Drawings, Plans, Charts, Botany, Stuffed Birds, Animals, Dried Fishes, &c. Savigny, who has been years in forming the beautiful collection of Natural History for the Republic, and which is the first thing of the kind in the world, is in despair. Therefore, we represented it to General Hutchinson, that it would be the best plan to send him to England also, as the most proper person to take care of the collection, and to publish its description, if necessary. This is now agreed to by all parties. The other morning I attended the corps of engineers in their meeting room; and being reproached with the conduct of the English in seizing the curiosities, I replied, that they must recollect, it is exactly the part they acted at Rome; and as for Mr. Savigny, is it a hardship for a traveller, and a man of genius, to have an opportunity of visiting England to so much advantage? They

said, perhaps the going to England would be felt as a palliation, if they had not been four years absent from France. Except ourselves, hardly an Englishman has been suffered yet to enter the town ; but it is completely surrounded by the British troops, and Admiral Bickerton is in the old port. The French and English sentinels are so near, that they can converse with each other.

“ In the meantime, the suffering inhabitants are impatient for the entry of our troops. They have been starving ; and, even now, while I write, horse-flesh (would you believe it !) sells for two hundred and fifty medinas the rotoli (near a guinea a pound.) With the greatest difficulty I obtained some sheep from the camp, and distributed them among the greatest sufferers. We had nothing to do, but to look at the hieroglyphics and other antiquities, with stomachs as empty and craving as the best conditioned philosophers ; no indigestions to cloud our intellects—all light, clear, incorporeal faculties ! If I should hint, that Cripps and I in fond remembrance represented occasionally to our imagination a College dinner, do not tell tales ! The Turks during the siege died of hunger, forty and fifty in a day. Provisions were not only at high prices, but could not be bought. Wealthy families saw death staring them in the face, and wished to die to end their miseries sooner. Among these was the family of the Imperial consul. A calf’s head sold for six guineas—a small pullet fifteen shillings—a single egg seven-pence half-penny—and this, in a country where the price of eggs is one dollar, or four and six-pence per thousand, at Damietta, and other places. The English will not suffer provisions to be brought in, till the French are gone.

“ The moment this business is ended, I shall embark for Athens, in our way to Constantinople, and to England. Lord Keith goes upon the new expedition ; which is said to be destined for Corfu. Admiral Bickerton remains to command the vessels on the coast, &c. General Baird, with the Indian army, will garrison Egypt. Mr. Hammer, known all over the Levant for his skill in the oriental tongues, came with us from Cairo. He is gone to England with his friend Sir Sidney Smith. I gave him a few lines to you, written at a moment’s notice ; and also a letter to Lady Uxbridge. — will be frightened out of his wits, not only because Hammer knows his ignorance of Arabic ; but because England will find in Hammer, one of the greatest scholars in Turkish, Arab, Persian, &c., which they have yet seen. One object of his journey to England is to translate the manuscript found at

Cairo, of the Arabian nights, not one quarter of which is yet known to us."

To the same.

"ISLE of ZIA, off Cape Semic,
October 25, 1801.

"While Antoine is cutting up an old goat, to fry some chops in an earthen pan, for Cripps's breakfast, I will make a sketch of the luxuries we enjoy in Greece. It may cool your ardour for exploring these seas; for when I think of the enthusiasm with which I once planned such a voyage, it seems as a dream that vanished with the moments of repose. Danger, fatigue, disease, filth, treachery, thirst, hunger, storms, rocks, assassins, these are the realities! Will you believe, that even I have repented the undertaking? You once said all my letters begin with disasters. How can it be otherwise? I must show things as they are. In my fourth decade, I no longer scatter roses among thorns.

"I call you to witness—was I always at sea a coward? Now the very sight of it sickens me to the heart. It has handled me so roughly, that I shall never face it like a man again. Coming from Egypt, we tasted a tempest in a Turkish sixty-four; and since were blown upon some rocks on the south of Naxos, to amuse ourselves with drying our rage, naked, upon a desert. But suppose it all goes well, and you have fine weather, and so on. Lice all over your body; lice in your head; fleas, bugs, cock-roaches, rats, disputing even to your teeth, for a crust of mouldy biscuit full of maggots. What's the matter now? 'Sir, we are becalmed!' Well, what of that? 'The pirates have lighted their signals, within two miles of us, if a breeze does not spring up, we are lost!' A breeze comes! it gathers force—it blows fresh—it whistles—it roars—darkness all around—away goes the fore-sheet—the sea covers us—again a calm—again the pirates—Mercy! mercy!

"Lord Keith left Egypt before we did; but the Capudan Pacha sent us, in a Turkish sixty-four, to Rhodes and to Cos. At Cos, we hired a Cassiot boat, for four hundred and fifty piastres per month, open, and built like a bean-shell. A pretty vessel, you will say, after the picture I have given you, to navigate these seas, in such a season. But Athens!—Could we return without seeing Attica! You would have rigged one

of Halliday's canoes, sooner than have been guilty of such neglect. If it had not been for Cripps, I should have turned back from Patmos. *J'ai le cœur gaté ; de sorte qu'il n'existe plus ; ainsi ce que je ferai, je ne puis m'empêcher de faire.*

"Do you remember the little boat, in which, many years ago, we embarked from Lynn, to fish in the Roads ; and night coming on, we all crept into a place where they kept their nets ! Exactly such a vessel is now under our command ; in which I squat at this instant, and scribble to you upon my knees—the heavens our canopy, and the sea our couch. Cripps is Capitano—I am Noster Huomo, as the Italians call the boatswain, in a dirty night-cap—and Antoine is Scrivano, without being able to write or read.

"To-morrow we cross over to a village, distant only twelve miles from this port, from whence it is only a journey of ten hours to Athens. When we arrive there, I will finish this letter. Our plan is to see Athens and Corinth, and then to cross the seas again to Smyrna ; from whence we go by land to Constantinople. I dread the voyage ; but when I consider that Ulysses escaped in a boat of this kind, after so many tempests, in the same seas, and that Columbus sailed to America, in another not much larger, I gather a little courage ; but these are all consolations while I sit in port—when Neptune rages, I shall squeak again. If Cripps were safely restored to his parents, I certainly should be very indifferent as to the rest.

"I have obtained treasures since I last wrote to you, in the way of medals and manuscripts ; but particularly of the latter. Our deeds with the monks of Patmos, we will talk more of, when we meet. It is enough to say, that I rescued from the rats and the worms in the library of the convent, many valuable works. I have a Greek MS. on vellum, of an author, I believe, unknown ; a Greek lexicon, of great antiquity ; bearing the title of the 'Lexicon of Saint Cyril, of Alexandria,' written in the same characters as the work. Saint Cyril was Bishop of Alexandria, in the reign of Theodosius the Second, successor of Arcadius ; and distinguished himself by his persecution of the Jews in that city, in the year 415. In the year 431, he presided in the Council of Ephesus, against the Nestorians. Arcadius founded the library and convent of Patmos ; and as Saint Cyril had great influence at the Court of his successor Theodosius, his lexicon might have been presented, among other gifts which the library received from Constantinople at that time. If so, the Patmos lexicon is 1386 years old, at least ; and, therefore, very good authority in establishing the purity of the Greek language : Wheeler, in

his travels, mentions having seen such a lexicon, in the library of a convent, at Mount Pentelique, with which I hope to compare the Patmos lexicon, in a few days; as since Wheeler's time, no travellers have been to interrupt the slumbers of the monks there, or to open their manuscripts. There is one thing to be observed; if the word *ἅγιος* is to be translated *saint*, Cyril could not obtain that epithet till long after his death. But, I believe, it was usual to distinguish eminent prelates and pious men, by that epithet, in all writings; not with the interpretation of *saint*, but *holy*, as *ἅγιος ξύλον*, the *holy cross*."

"ATHENS, October 31, 1801.

"We have been here three days. We sailed into the port of the Piræus after sunset, on the 28th. The little voyage from Cape Sunium to Athens is one of the most interesting I ever made. The height of the mountains brings the most distant objects into the view, and you are surrounded by beauty and grandeur. The sailors and pilots still give to every thing its ancient name, with only a little difference in the pronunciation: they show you, as you sail along, Ægina, and Salamis, Mount Hymettus, and Athens, and Megara, and the mountains of Corinth. The picture is the same as it was in the earliest ages of Greece. The Acropolis rises to view, as if it was in its most perfect state: the temples and buildings seem entire—for the eye, in the Saronic Gulf, does not distinguish the injuries which the buildings have suffered; and nature, of course, is the same now, as she was in the days of Themistocles. I cannot tell you what sensations I felt—the successions were so rapid—I knew not whether to laugh or to cry—sometimes I did both.

"Our happiness is complete. We have forgotten all our disasters, and I have half a mind to blot out all I have written in the first part of this letter. We are in the most comfortable house imaginable, with a good widow and her daughter. You do not know Lusieri. He was my friend in Italy many years ago. Think what a joy to find him here, presiding over the troop of artists, architects, sculptors, and excavators, that Lord Elgin has sent here to work for him. He is the most celebrated artist at present in the world. Pericles would have deified him. He attends us every where, and Pausanias himself would not have made a better Cicerone.

"Athens exceeds all that has ever been written or painted from it. I know not how to give an idea of it; because, having never seen any thing like it, I must become more familiar with so much majesty before I can describe it. I am no

longer to lament the voyage I lost with Lord Berwick; because it is exactly that which a man should see *last* in his travels. It is even with joy that I consider it as perhaps the end of all my admiration. We are lucky in the time of our being here. The popularity of the English name gives us access to many things, which strangers before were prohibited visiting; and the great excavations which are going on discover daily some hidden treasures. Rome is almost as insignificant, in comparison with Athens, as London with Rome; and one regrets the consciousness that no probable union of circumstances will ever again carry the effects of human labour to the degree of perfection they attained here.

"In all this satisfaction I must lament the plan pursued by the agents of Lord Elgin in this place. Under pretence of rescuing the arts from the hands of the Turks, they are pulling down temples that have withstood the injuries of time and war and barbarism for ages, to adorn a miserable Scotch villa.* The fine bass-reliefs of the Parthenon are embarking for Constantinople, and Minerva blushes for the asylum to which her altars are to be conveyed. We have already changed the plan of our return, and as soon as we have visited Corinth, Sicyon, Argos, Megara, and Eleusis, we shall set out by land for Thessalonica. In our route, we shall pass by Marathon, Thebes, and the Straits of Thermopylæ, through all the north of Greece and Thessaly, into Macedonia; by which means we hope to reach Constantinople sooner, and as we shall traverse a country that travellers have rarely explored, we may find something yet unnoticed to give a relish to the journey. Lusieri is just returned from an excursion into Arcadia; which he describes as exactly in its ancient pastoral state; the paradise of Greece, and full of the richest sources of painting and poetry. 'Scenes,' he says, 'in which he could forget his own country, and the whole world.' The account he gives of it makes us wish to visit it; but, in this manner, when should we see England again? Let the pipe of the shepherd gladden the valleys of Arcadia, as we draw nearer to more welcome vibrations. The twang of a college-bell would, at present, sound sweeter in my ears than the song of the sirens.

'Ah! why did fate his steps decoy
In stormy paths to roam,
Remote from all congenial joy?
Oh, take the wanderer home!'

* It is pleasing to reflect, that one ground of Dr. Clarke's lamentation has proved to be erroneous; and whatever difference of opinion may still exist with respect to the propriety of the spoliation here deprecated, there are few, we believe, who are not disposed to rejoice, that the fruits of it are now permanently deposited in the British Museum.

"We have paid a visit to poor Tweddel's grave. He is buried in the middle of the temple of Theseus; and as nothing but a heap of earth covers him, we are endeavouring to protect his remains by a more decent and worthy sepulchre. We shall cause his body to be laid deeper than it now is, and place over it a simple but massive covering of Parian marble, with an inscription, containing merely his name, age, and country. I will write to you again, as soon as we arrive in Constantinople."

To the same.

"SUNMIT OF PARNASSUS, December 15, 1801.

"It is necessary to forget all that has preceded—all the travels of my life—all I ever imagined—all I ever saw! Asia—Egypt—the Isles—Italy—the Alps—whatever you will! Greece surpasses all! Stupendous in its ruins! Awful in its mountains!—captivating in its vales—bewitching in its climate. Nothing ever equalled it—no pen can describe it—no pencil can portray it!

"I know not when we shall get to Constantinople. We are as yet only three days distant from Athens; and here we sit on the top of Parnassus, in a little stye, full of smoke, after wandering for a fortnight in Attica, Bœotia, and Phocis. We have been in every spot celebrated in ancient story—in fields of slaughter, and in groves of song. I shall grow old in telling you the wonders of this country. Marathon, Thebes, Plataea, Leuctra, Thespia, Mount Helicon, the Grove of the Muses, the Cave of Trophonius, Cheronæa, Orchomenæ, Delphi, the Castalian fountain—Parnassus—we have paid our vows in all! But what is most remarkable, in Greece there is hardly a spot, which has been peculiarly dignified, that is not also adorned by the most singular beauties of nature. Independent of its history, each particular object is interesting. Attached to that enthusiasm, which imagination or memory excites in its full force, it becomes a scene of adoration.

"We came to-day from Delphi. To-morrow we descend towards the Straits of Thermopylæ, and hasten forward to the vale of Tempe, and to Olympus. We have toiled incessantly, and I hope not in vain; for we have made many discoveries, that have escaped less industrious travellers. Of these it is impossible to tell now. I have much to say to you, in little space, and with little time, in great fatigue, and with an un-

pleasant consciousness of not having written to Uckfield since I left Egypt.

"Our journey to the Morea answered all our expectations. This has surpassed them. We have no longer any complaints to make. We ride on fine horses, in the finest country in the world, and with weather such as you would be proud of in summer.

"But what will you say to the acquisitions I have made for the University of Cambridge: the tomb of Euclid, and the colossal statue of the Eleusinian Ceres, from her temple in Eleusis, the known work of Phidias, and the gift of Pericles? We have freighted a ship from Athens, with antiquities; but it would fill a volume to tell you the difficulties I had to encounter. Lord Elgin had all his agents and artists in Athens, to pull down the temples, for materials to adorn a Scotch villa. Acquisitions for others were even prohibited; and I had to fight through the intrigues of a herd of rascally Greeks, the obstacles arising from a thousand causes, from expense, from bad air, from want of every necessary machinery, and last, and greatest, from *consular* chicanery, and *diplomatic* jealousy. But they are bound for England, and I breathe freely.

"First of all, I have to thank Cripps, without whom I could have done nothing. And the expense of conveying to England the enormous statue of Ceres, after I had obtained it, he has taken upon himself, by his own desire. The tomb of Euclid (you will hardly credit it) I bought of a consul, from under the very nose of the ambassador's chaplain, and his host of Gothic plunderers.

"The removal of the statue of Ceres has been attempted by the French, upon a former occasion, without success. The Eleusinians also relate, that once being brought to the shore, she returned back to her station, by a miraculous flight, like the virgin of Loretto. — had, for once in his life, a flash of taste, and wrote to the ambassador to remove it, as I have since learned, but they gave it up in despair. At last come two *demi-semi-travellers*, from Jesus College, Cambridge, and whip it off in a trice. I'll tell you how it was done.

"After we returned from the Morea, I found the goddess in a dunghill buried to her ears. The Eleusinian peasants, at the very mention of moving it, regarded me as one who would bring the moon from her orbit. *What would become of their corn*, they said, *if the old lady with her basket was removed?* I went to Athens, and made application to the Pacha, aiding my request by letting an English telescope glide between his fingers. The business was done; the telescope, and the popularity of the English name at present in Turkey, determined the

affair ; and leaving Mr. Cripps in Athens, I set out for Eleusis, attended by a Turkish officer, the *Chogodar* of the Pacha. But how to move a statue, weighing sundry tons, without any wheeled machine, ropes, levers, or mechanical aid !—I made a triangle of wood, so—

(Here he gives a description of the machine :)

on which I laid the goddess, with her breasts upwards, and by means of cords made of twisted herbs, brought from Athens, and about sixty peasants, she vaulted into the Acropolis of Eleusis, and from thence to the sea-side, and at length into our little *Cassiot* vessel ; moving the space of a mile, almost as fast as a snail.

“ Behold the goddess then bound for England, and touching at the Piræus, to take leave of the Athenians.

“ The statue of Ceres is entire to the waist, being originally, as it is now, a bust ; but of such enormous size, that I know not where the University will place it. On her head is a coronet, or basket, adorned with all the symbols of her mysteries. Her hair is bound with fillets, and her breasts are crossed with bands, supporting in front the mask, described by D’Hancarville and Montfaucon as found on the Greek vases.

“ The tomb of Euclid consists of a single column of marble, exactly answering the description given by Pausanias of the tomb of Epaminondas, at Mantinea, in Arcadia. It contains a bass-relief, representing Euclid in the long robe, which the Greeks in their sculpture particularly adopt to distinguish the philosopher, with his scroll in his hand ; and above, this inscription :—

ΕΥΚΛΙΔΑΣ ΕΥΚΛΙΔΟΥ
ΕΡΜΙΟΝΕΥΣ

“ It is more interesting in showing that he was a native of the town of Hermione, in the Morea ; and may account for his having founded the school of Megara. But here you have the start of me, for I know nothing of his life, and am only occupied in thinking how interesting such an antiquity must be for the University of Cambridge, where the name of Euclid is so particularly revered. We have many things besides : the statue of Pan, that was in the grotto of that deity in the Acropolis, at Athens ; part of a bass-relief from the Parthenon, the work of Phidias ; a whole column of verd antique, from the temple of Minerva Polias ; and many other bass-reliefs, inscriptions, &c. I have collected above a thousand Greek

medals, bronze, silver, and gold; of plants I will not now speak. The manuscripts I have already made you acquainted with. Our minerals we completed in Constantinople, and have hardly found any since.

"In the Morea I obtained several Greek vases, which will be a discovery highly gratifying to Sir W. Hamilton, who had before great reason to believe that these vases were found in Greece, by a specimen brought from the isle of Milo, by Messrs. Berners and Tilson. I have enclosed for you and your friends, two or three crocuses, which I plucked in the plain of Marathon, for the express purpose of sending you, in a letter, to England. At Delphos we found several inscriptions, which I believe have not been known to travellers; at Orchomene many more, and very interesting.

"We have hardly a rag to our backs, and know not how we shall make our wardrobe hold out to Constantinople. Clean shirts upon Sundays, like the Russians, and coats out at elbows. As for Antoine, he is dressed in the blankets of the Albanians, and perhaps, the best off of all; your Macedonian raiment laughs at a modern frock. Cripps has let his beard grow these six months. I want no such marks of *sanctitude*. Certainly, you would not recognise either of us. We have just heard the news of a general peace, so we shall abbreviate our journey, by a cut through France, and a visit to Paris.

"I know you will pay heavily for this letter, and that is perfectly indifferent to me. If you will make me write, you should be taxed to help government to patch up accounts at the end of the war. The tomb of the Athenians still remains in the plain of Marathon, as well as those of the Thebans at Cheronea. (We found the tomb of Hesiod, at Orchomene, and of the Spartans, in the defile of Thermopylæ. This note I have added since.) The little dog you left me, is with us still. But I lost the most beautiful animal in Thebes; a dog like a lion, that I had brought from the temple of Esculapius, in Epidauria, in the Morea. He was my companion by day, and our guard by night. The thievish Thebans decoyed him, and I saw him no more.—I cannot see to write more. Our little cabin is filled with smoke, and my eyes stream with tears of acknowledgment for a fire so near the seat of Apollo. Parnassus affords us sensations at our fingers' ends, to which we have long been strangers. Adieu! God bless you! Cripps sends many earnest wishes for a speedy meeting."

"LARISSA, in THESSALY, Dec. 22, 1891.

"Olympus in view, and so covered with snow, that I fear we shall not be able to gain the summit. The Peneus roars

under our windows, swelled with the late rains, and as muddy as the Nile. Things are not so much changed in Greece as is believed. The names of places remain. It is our manner of pronunciation that makes the modern appellations new. Traditions remain worth notice. A peasant told me this day, that the first voyage attempted by sea, was made from Allos, a little port in the plain of Crocins. What a curious relic of the Argonautic expedition from Thessaly ! They also boast of having been the first people who tamed and mounted horses. We did not find the bellebore upon Mount Ceta, nor can conceive what Tournefort means by his manna tree, in the isle of Syra. To-morrow we go through the vale of Tempe, pronounced *Temba*, by the moderns. The Anacharsis map of the defile of Thermopylæ is not worth a *sous*. That of Platæa is worse. I found the tomb of the Spartans, as I can prove to your satisfaction ; and what gratifies me much, I discovered the ruins of the city of Tithorea, hitherto unknown, and found inscriptions to prove the truth of the discovery. I obtained some good medals here."

To his Mother.

"SUMMIT OF PARNASSUS, in ice and snow,
Dec. 16, 1801.

"I am well aware what a length of time it is since I wrote last, for in my voyage from Egypt, I had no opportunity to send a letter to England ; and look what paper I now use. The pleasure of dating a letter to you, on the very pinnacle of Parnassus, induces me to venture a few lines by a doubtful road, though I must add, that nothing but the date was written there. I am now at Salonichi, the ancient Thessalonica, in Macedonia, still on my road to Constantinople ; having travelled over all Greece and Thessaly, and have only to say we are both well, for I have no pleasure in writing, until I can get news from Uckfield, and know how you all are ; which I hope to receive upon my arrival at Constantinople, within twenty days from this time, and it is now the 30th of December.

"I wrote a long letter to Otter, which I am sure he will show you, though it contains nothing that will be interesting to you, as it is all about antiquities, and such sort of trumpery.

"The news of the peace has just reached us, and we shall

by that means be able to shorten our road home, and go through France.

"After I arrive at Constantinople, the intercourse between us will continue with less interruption, and we shall often hear from each other, though I hope I do not deceive you or myself in saying that we shall soon be in England. We are pursuing now *a direct road home*, and there will be nothing to call us to the right or the left; no more Parnassian hills, Arcadian vales, or plains renowned in song. We shall pass the stupid marshes of the Danube, and the fields of France, like the flash of a meteor. Do you recollect the letter you once received, which began at Naples, and ended within forty miles of Uckfield?—such a letter I hope soon to send you.

"I have had no return of my fever since I left Jerusalem. It took leave of me upon my arrival in the convent of the Holy Sepulchre.

"Mount Olympus is in full view before us, from this place. They show here the stone pulpit in which St. Paul preached when he visited Thessalonica."

To the Rev. George Stracey.

"THESSALONICA, Dec. 30, 1861.

"Dear Stracey,—What a length of time, and I have only received one letter from you! I know not your address, therefore, am forced to send this under cover to ———, and even his I have forgotten, so it will be directed to his brother.

"We have travelled over all Syria, Egypt, Greece, Thessaly, &c., and are now in Macedonia, on our way to Constantinople. It would be absurd to give you our travels in detail here, and even impossible.

"When I have time to write to you, I am too fatigued; and when I am not fatigued, I have not time. And this you will readily imagine is the usual event of travel. I have often wished to make you acquainted with the important acquisitions we have made. From the monastery of the Apocalypse in the isle of Patmos, I procured some Greek manuscripts; one of which appears a work of Socrates, or of his disciples, that has not yet been known. I have also obtained in Egypt, a complete copy, in Arabic, and I believe the only one known of the 'Elf Leela, O Leela;' or, 'Thousand and One Nights.' You know the translation we have from the French, does not contain one-fourth of the original work. It is in four volumes

quarto. Mr. Hammer, who went with Sir Sydney Smith to England, has promised, and, indeed, desired to translate it for the public.

"I have a Greek manuscript of St. Cyril of Alexandria, and several Greek works in manuscript on music and poetry.

"The number of cases I have sent to England amounts to seventy-six. They are all well filled. I have above one thousand Greek medals, in gold, silver, and bronze; above six thousand foreign plants; a very large collection of minerals, made in all the different regions of our travels; a great number of insects, &c. Drawings, maps, charts, plans, inscriptions, are among the rest.

"I hope it will not be long ere we meet, as we go from Constantinople to Vienna, and thence through France, by the way of Paris to London.

To the Rev. William Otter.

CONSTANTINOPLE, Feb. 15, 1802.

"We came by land from Athens, a route hitherto unpractised by literary travellers. The long dreary tract of Thrace made us often sigh for the shores of the Bosphorus, though we now more eagerly long for the banks of the Danube. We expect every day to begin our journey over Mount Hæmus to Hungary, and have already heard that the troops of Ali Pacha have retired towards Jassy; but Lord Elgin thinks it better we should wait till the hordes which have long infested the road have disappeared; and profit by the opening of spring, which takes place here in the beginning of March to set out for Vienna and Paris. The disorders will hardly be greater than those between this place and Salonichi; we passed one night upon the ashes of a town newly burned, and at that moment in the hands of the rebels.

"We are now in the midst of the balls and masquerades of the Carnival, as you may recollect we were at the same period last year. Cripps, the Proteus of the festivity, assumes as many shapes and dresses, as there are partners for him in the dance.

"I cannot imagine to whom it is I am indebted for the paragraph in the papers. It first appeared in the Frankfort Gazette, dated Paris. Since, it has been transported, with various modifications, to other places, and lastly I find it in the *True Briton*. Sometimes my name is written *Clark*, and others *Klarke*. I have no other objection to such newspaper

celebrity, than that I am always lugged in at the tail of Mr. Hammer, which makes me believe that —, whom he accompanied home, has made use of my name, that it might not appear a puff solely for Hammer, and so be attributed to him. I gave Hammer a letter, written in great haste, at Rosetta, to you, just as he left us, to join Sir Sydney, and hope you will do him the honours, at Cambridge. He is the greatest Arab scholar we have. As for my *confirming his observations on the plain of Troy*, it is rather a sweeping puff, for he has no observations on that subject but those I gave him, and I believe never was there. They allow him also credit for having discovered the MSS. of the Arabian Nights, which is a discovery he was never able to make; nor would he believe I had done it, till he saw the work in my hands, and has promised to translate it. He wrote to me from Malta to renew his offers, and begged I would send the MSS. to England. The paragraph in the *True Briton* must have been inserted by himself, as it is not English, but evidently the composition of a foreigner.

“Well, our long journey is drawing to a conclusion! You will find it has wrought greater changes in me, than you will imagine. Whether for the better or worse, you must judge. For these last eleven years, let me ask you, where have I once been *still*? It is time the *moving* principle should cease. A man in his fourth decade, has lost much of that restlessness which perpetually attaches him to external objects, and begins to look within himself, to see how the list of his impertinences will sum up at last. Sometimes transitory sparks, the volatile indications of expiring fire, stimulate for a moment a disposition to counteract the *vis inertiae*; but they vanish, and the residuum consists of those decomposed principles which baffle human synthesis.

“In examining the extent of our travels by Mercator’s chart, I find they comprehend no less than 45 degrees of east longitude, from the meridian of Greenwich to that of Cape St. Mary, in the isle of Madagascar, and 38°. 30. 30. of North latitude. We have visited three of the four quarters; Europe, Asia, and Africa; and certainly in Asia, the tract we passed over comprehends no small field of inquiry. The globe offers very little variety of climate, to which we have not been exposed, and in the examination of its productions, we have the satisfaction to hope, that you will neither reproach us with idleness nor neglect. In the journey home, we expect to lounge a little, as the objects it will present, demand neither painful nor laborious research. I will now tell you what plan I have chalked out for that journey. The intelligence I have collected respecting the plain of Troy, will be interesting to you; I

am assured it will be interesting to others : be that as it may, I shall not bring to England an indigested mass, because I do not think its atmosphere will be favourable to its future solution. For this reason, I shall occupy myself in the road, at *caravanserais*, and in dull post-houses, in putting together a confirmation of what others have discovered in the plain of Troy, and a series of arguments upon the truth of the story of the war ; because I think the identity of the place, cannot continue an object of dispute ; *malgré* the insane reveries of Bryant. Some new discoveries, of course, I hope to offer ; and among these, the mound of the plain, with the tombs of Ilus, and of Myrinnæ ; New Ilium ; the real character and topography of Gargarus ; the source of the Simois ; and the characteristic phenomena of the sources of the Scamander ; the temple of *Jupiter Liberator* ; antiquities, inscriptions, and some remarkable collateral evidences respecting the event of the war of Troy, considered abstractedly, with respect to Homer.

“First, I have to thank you and Malthus beyond all measure, for the books you sent me. They were not given to me till my return here, long after my visit to Troy, but they are welcome. ‘C’est l’embarras de richesse,’ as Morritt says, in his List of Believers, for I have such an anecdote for you. It is now two days since our ambassador sent for me into his bedroom, and after a long preamble, told me that if any thing he could do to forward my inquiries respecting the plain of Troy would be of use to my work, he begged I would name it ; that he would send artists, or engineers, expressly to the Dardanelles, to take any drawings, or make any observations I might require. As we had never before experienced other than obstacles from that quarter, I stared, and felt uneasy how to reply ; at length I told him, that if such written notes or queries would serve to guide him in visiting that country, as he required of me, for my use and advantage, I would put together a series, from which he might derive what amusement he pleased. However, he still acted the Mæcenas ; and, I suppose, expected a full eulogium from this rebellious pen. I have it ready : at least, these words contain the whole acknowledgment.

‘Timeo Danaos, et dona ferentes.’

“The letter from Malthus I found here, with books, after my arrival from Egypt and Greece. It had been here almost a year. This will account for my not having answered it, which I shall now do. Morier is a very good fellow, and was always sincere and friendly to us. I suppose you have seen

his pamphlet on the campaign with the Vizier's army. We play at chess together, till we greet the rising sun ; as you and I, in other days, did at backgammon. Hunt is in the Archipelago, and Hamilton at Thebes, in Upper Egypt. Carlyle long ago gone to England.

The liberating of the Maltese slaves, some of whom had been forty years in chains, is a forlorn hope of the Capudan Pacha's, to do away the evil impression made by the murder of the Beys. It was patched up between — and him. I was at the palace when these poor men came to thank the English nation. It was an affecting sight. Many will return to their relations, after being thought dead for several years. At present the English have a presumed popularity with the Turks, but this you may depend upon, from the moment the French ambassador arrives at Constantinople, adieu to all union between England and the Porte. Our merchants are well aware of this.

"We continue our ride towards Vienna, on horses. Perhaps we may get a carriage at Bucharest ; if not, it will be a famous exertion of equestrianism, from Athens to Vienna.

"Are you not impatient to see the figure of the Eleusinian Ceres ? It was shipped the other day at Smyrna, before a great concourse of people. If I had not used precaution, diplomatic intrigue would have deprived me of the honour of sending this figure to Cambridge. Our ambassador has more than once expressed his chagrin, at our having, as he says, plucked the jewel from his crown."

To the Rev. Robt. Malthus.

CONSTANTINOPLE, March 16, 1802.

"I have two letters of yours to answer, and what will you say, when I assure you they are the only productions of your pen I have received since I came from Petersburg. The first of these arrived with the packet of pamphlets on the Troade. It bears date March the 1st, 1801. Your second letter is dated December 25 ; I received it a few days after the other. An illness, the effect of the climate, which brought me to extreme danger, and from which I am not yet sufficiently recovered to leave the house, prevented my answering both.

"I have just ended a long letter to Pallas, and I gave him your queries respecting the peculiar checks to population

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among the Nomades. Pallas is getting old, but his faculties are in their full force, and he is the most communicative servant I ever saw. He is troubled with a gay wife. We lived the summer in his house, and there was hardly a day that he did not instruct me in some new fact, or give me original papers, maps, and drawings. We left our carriage with his wife (as for him, and it will afford you a trait of the good man,) he would accept of no recompense, nor any other memorial than my old round hat, which I had worn the whole journey from Cambridge; because, he said, 'As I lounge in my vineyards at Sudak, it will fill my head with English ideas; and perhaps impregnate my brain with the enterprise which spurred its owner from the frontiers of Finmark, to the mountains of Caucasus.' I can give you no idea of their hospitality; it was a continued feast, intellectual as well as sensual. When we left them, they provided us with beds of fine red leather, sheets, provisions, and a new collection of comforts and necessities for the voyage.

"The manuscript you mention is indeed a great acquisition. Hamuer had promised to translate it. It is in four volumes or cases, in quarto, and the Arabic, in translation, generally augments to double its original bulk; as no other can render the extraordinary conciseness and masculine brevity which characterizes that language. Viewing the mass of science it contains, its importance as an avenue to all the oriental languages, among which it appears as a venerable tree overshadowed by the multitude of its branches, it is to be lamented, that in our schools and universities, it has not been rendered an essential part of education.

"But I have such a collection of interesting manuscripts that their mere names cannot be indifferent to you.—

"In Greek, I have the works of Plato; the Lexicon of St. Cyril; a volume of Greek Poems; and two works on Ancient Music.

"In Arabic, the 'Arabian Nights,' or 'Elf Leela, O Leela;' the 'Delail il Hairat;' the 'Insarf,' or Arab Grammar; the 'Koran;' Arabic Poetry; and the famous Astronomical work of 'Olug Beg.' Also the History of Nouredin, Prince of Aleppo, during the Crusades; and Salaheddin, or Saladin, by Schehabeddin; a most valuable MS. in 4to.

"In Persian, the whole of the Works of Saadi, the Persian Milton; containing, besides his Gulestan, or Garden of Roses, many works never translated; the Persian Prosody; the Persian Martial; from which it seems some of the Epigrams in the Latin Poet were derived; the works of Bidfai, or Pilpay; containing the Fables and Apologues known afterwards

to the Greeks under the name of *Æsop* ; the ' Chosen History of Mohammed Kaveeni,' from the creation, to the time of the caliphs and scheiks ; Tales, Poems, &c.

" In Turkish, the *Marvels of the Creation*, a copy of which is in our Public Library, at Cambridge, as one of the most rare and ancient productions of oriental literature. I believe the Cambridge copy is in Arabic. Mine contains the course of the Nile from its sources, which the author places, with Ptolemy, in Africa, in the Lunar Mountains. The *Rury Nameh*, or *Equinoctial Tables*. Sentences of the Mohammedan Law ; religious works, &c.

" In Coptic, a copy of the Four Gospels as preached by the earliest propagators of Christianity in Egypt ; and some other MSS. the list of which is not now by me.

" In Abyssinian, a copy of the Gospels, brought from thence by one of their bishops, a Negro, to Grand Cairo, with other MSS.

" In Hebrew, a beautiful and useful MS. if I may not be allowed to say important. It is a copy, in folio, on vellum, of the Bible of the Karæan Jews, a sect become extremely rare ; and established, under the protection of the late Empress of Russia, on a high rock, in the Crimea. You know they differ from the other Jews, in the superior purity of their traditions and annals, and in having kept their copy of the Bible, from the books of Joshua, free from the interpolations and corrections of their Rabbis. Pallas succeeded in getting it for me, after I had left it in despair.

" I have also a Greek copy of the Gospels, of the highest antiquity, on vellum, a MS. brought from Greece to the Crimea, at the first introduction of Christianity there.

" It is vain for me to attempt to tell you now the rest of our acquisitions. What will be your surprise, when I state the number of cases that belong to me only, at seventy-six ? It is enough to alarm me as I write. Those of Cripps are equally numerous ; and I may with confidence hope for your approbation of our labours, when I shall prove to you, that during the time we have been absent, we have sent home more literary treasures, than any travellers, employed by kings and governments, and assisted by all the power and riches of their patrons, have yet done. Such parties were also more numerous than ours, and by employing more time in their researches, endured less fatigue, were exposed to less danger, and enjoyed better health. Do not accuse me of self-encomium. I write it as a confession to a friend, who, if I die, may know what we have been doing, and render justice to the virtues and enterprise of my excellent companion, in praise of whom I

can never say enough. These cases contain minerals, plants, manuscripts, books, medals, inscriptions, vases, marbles, and other antiquities; maps, plans, pictures, seeds, models, costumes, and utensils; and in every article, there are some discoveries, which are yet new to the world; particularly among the minerals and plants. We regret the time we now pass here, though we are seldom a day unemployed. The perturbed state of the Turkish empire, between this place and Vienna, detains us. I wish I had gone with my brother to Marseilles. One day we hear that the road is open, the next, that the couriers have been stripped and robbed by the rebel Pachas. Turkey is at its last gasp, and waits only for some potent state to put an end to its insignificance. Long after the invasion of Egypt by the French, the Kislär Agha, or chief of the black eunuchs, was the only one who had courage enough to make known the event to the Grand Signor; upon which the Sultan's mother accosted him in this gracious manner; 'You black devil! if ever you interrupt my son's peace, by ill news, I'll have you instantly strangled!'

"We go from Vienna to Paris, and have already written to Otter to join us. Perhaps you will make one of the party; it would be pleasant for the tesserarchy to return together, as they sallied forth. Our Gallic effusions would flow less embarrassed by Anglicisms, than when we opened the campaign in the Bury coach; and I, who landed upon the Continent on stilts, may walk the Palais Royal on the tip-toe of ease and curiosity.

"Mr. Streatton has not succeeded in his mission to Egypt—It ended by a complete misunderstanding among the Beys, Turks, and English. It is said here, by those who pretend to be in the secret, that all this was premeditated on our side, and that the civil war has been, and will be, fomented, to afford us a pretext for holding the country. If so, the Russians will soon give the Grand Signor a visit of protection and plunder. Britannia plucks the white hairs, and Scythia the black, and the poor old dotard is left bald between them.

"Can any thing be more astonishing than the history of this war? Posterity will scarcely believe what they read. Would you not have sent any man to Bedlam a few years ago, who should have ventured to predict, that the last battle, and the most sanguinary, of this long contest, would be fought on a desert in Africa; or that England could have made such a monstrous exertion of her strength, as to send armies from the mother country, and from India, to meet in Egypt against the French?

"Large flakes of snow are now falling, and the houses of

this city are covered with snow. You see how much deceived a man may be who estimates climates by latitude. At the Dardanelles I might at this day gather anemones, and enjoy the warm beams of the sun. Naples, in the same latitude, is now in summer heat. The extraordinary vicissitudes of climate here result from its situation at the mouth of the Bosphorus, which I can only compare to being placed in a passage with all its doors open, or at the nose of a pair of forge bellows. East or west winds are here never mentioned; they are not known. It is always *tramontana*, or *vento de fore*, a name they give the south wind. If you could look out of my window, you might fancy yourself at Petersburg. And this, too, in the middle of March, when even in Finland some appearance of spring is seen. We have regularly estimated the thermometer from the day we left you, and can present you with many curious observations on the temperature of elevated regions, estimated on the summits of Gargarus, Parnassus, Helicon, Mount Hymettus, &c., and of the degrees of heat at the base and summits of the Pyramids, at the same hour. Cripps claims the chief merit of punctuality and accuracy in this respect. I began this letter on the 16th; I end it on the 18th, exactly at mid-day, and therefore will add, that the thermometer of Celsius is at this moment 3 degrees above 0, the freezing point, which equals 37 degrees of Fahrenheit. Perhaps before night a variation will take place of 10 degrees of heat, and to-morrow we may be all sitting with the windows open; which is enough to kill a horse, if he be of English breed, and accustomed to beef and beer. Those who diet, evade more easily the disastrous consequences of a check to perspiration. The Turk has his head wrapped in a thousand folds, and lives upon pure element and rice. All weather is alike to him. Direct your next to Vienna, 'aux soins de Messrs. Fries and Co.' Adieu! We are informed the treaty goes on at Amiens; all is kept secret here respecting the peace.

"You strongly recommended a visit to Athens; we anticipated your good wishes, and were there before we received them. Our journey from thence, by land, was full of information, until we entered Thrace, and then the plains of Royston would have been more interesting, because more fertile, nearer home, and free from banditti. The boasted vale of Tempe, is a defile; it is something like Matlock, but wilder; more savage than Salvator Rosa, and with nothing of Claude. I cannot tell why the ancients made such a fuss about it; perhaps because half of them never saw it, and took its character from hearsay; the other half, like mankind every where, stupidly

admiring what is said to be admirable. It is like a crack in a great wall, at the bottom of which is a river, sometimes inundated, sometimes dry. The passage narrow, the sides craggy, bare, lofty, and perpendicular. Its whole length not above a mile.

"I am sorry to find you confess your breach of duty, in not having written a book. But you have been engaged in the press, because I heard at the palace that you had published a new edition of your *Population*; and moreover, I was there assured, so long ago as last year, that you had written a work on the *Scarcity of Corn*. How does this accord with your declaration? Perhaps it is a pamphlet, and therefore, strictly speaking, not 'a book.'

"March 25.—I have opened my letter again to add, that yesterday I made an acquisition of Greek manuscripts that will surprise you, and which you must include in the first article of my list. They consist of no less than fifteen volumes, and are as follows:—1. *Commentaries*, by St. Chrysostom. 2. *Lives of the Saints*. 3. *Life of St. Joasaf*. 4. *Different Copies of the Gospels*. 5. *Acts of the Apostles and Epistles*. 6. *Ancient Homilies, &c.* They are all on vellum, and the character is very ancient. I have also a printed copy of *Homer*, as it was first imitated from the manuscript, but know not the date.

"The news of the road to Vienna gets worse and worse. Lord Elgin's courier has been murdered by the Turks. I know not which way we shall go; perhaps by sea to Italy."

To the Rev. William Otter.

MOUNT HÆMUS, Pass of the Balkas,
April 10th, 1802.

"I am just descended from the tip-top of an Arab stallion, on which I have been riding in grinning agony for eight hours, over the summit of the highest mountain in Thrace, and no great height after all. If I was nearer England I would bring home my horse, which is much more beautiful than any description of Hæmus, notwithstanding the hordes of banditti in its defiles.

"Well! at last we have left Constantinople. The Sublime Porte, in the sublimity of its policy, sends an ambassador extra, and plenipo, to Paris. Lord Elgin applied to the Reis Effendi, to include us in his suite, as the sons of princes of the *Djious*,

or Infidels, and we have now been ten days in a continual procession of a hundred horsemen, prancing with lofty plumes on our heads, and superb hussar uniforms, covered with gold lace, to sustain, as directed, the gasconading appellation of Beys-Adeys. The windows of Pera were filled with all the pretty girls to see us pass out to join the embassy, which left the city in great pomp. The whole road was filled with horsemen. The ambassador in a green turban, and embroidered scarlet pelisse, with the richest coverings to his horse. Prince Morosi, a Greek, his secretary, on a managed Arabian, in satin and embroidered robes, his horse adorned with cloth of gold, and stirrups of the same, burnished. Then followed dragoons, bearing in rich port-feuilles the letters of credence, officers of state, and bearers of utensils, bottles of lavation, incense ewers, pipes, and coffee-pots.

Malgré a few square inches of leather which I have lost by all this parade, our journey has been more pleasant than any equestrian jaunt we have yet had in Turkey. The ambassador, a little Turk in a bundle of fur, takes charge of all our necessities. His Tartars prepare us nightly a house for our repose, and every morning as I make him the Saban Seirola Efendi! he inquires whether the Mussulmen have done their duty. Who could have imagined on seeing this train leave Constantinople, that it was intended to preserve the same external pageantry all through Bulgaria, Wallachia, Transylvania, Hungary, Germany, and France?

"The English Tartar of the mission, with eleven persons, was murdered a few weeks ago in this defile, by the robbers. Their horses returned after three days to the khan whence they started, which gave the first intelligence of their loss. In the party were three merchants, travelling to Constantinople.

"I hope you will receive news of our arrival in Vienna, almost as soon as this letter. We are compelled by the disordered state of the country, notwithstanding our escort, which is to be increased to six hundred men, if the danger becomes more imminent, to make a circuit by Bucharest (and perhaps we may go, first, even to Silistria,) Hermanstadt, and through the whole of Hungary. If we can visit the mines, we shall not regret this delay.

"Plants are just beginning to bloom. We collect all we see. The *chasse de medailles* is at an end. Botany will therefore meet with more attention. The only curious antiquity in this country is the language, which I do not understand. It so much resembles the Malo-Russian, that Antoine converses with the natives.

"I have the happiness to tell you, that the enormous statue

of Ceres is on board the *Princessa*, Captain Lee, bound from Smyrna to England. I dreaded the voyage it made from Athens.

"Now, I must tell you, what surprising success I have had in the *chasse de manuscrits*. You will find in my last letter to Malthus, a catalogue of them; but since I wrote to him, on the very eve of my departure from Constantinople, an acquaintance with a Greek Prince, a man of letters, who became my friend, and was interested in my labours, opened the way to perhaps almost all that remains of Greek literature, in manuscript, in the Turkish empire. Prince Alexander Bano Hantzeri is his name, of the remnant of those noble Greeks left in Constantinople when it was taken by the Turks. He procured for me fifteen volumes of Greek manuscripts; a copy in folio, on vellum, perfect, of the works of Dionysius the Areopagite, who was converted by St. Paul, at Athens; a work on Natural History, never published; the Dialogues of Theodore of Syracuse, Poems; beautiful copies of the Gospels, none of which, in any instance, contain the Apocalypse. He has moreover promised to add fifteen more, and to procure besides, MSS. from Mount Athos, whence I hope to obtain a copy of Homer, and one of Demosthenes. My beautiful copy of Plato is gone home.

"The little Essay on the Troade goes on, increasing as I advance, though with pigmy strides, something like the pace of our plenipo. He will stop a day at Shumbe, for the *Courban Beiram*, or sacrifice of the lamb; a great ceremony with the Turks.

"Cripps is as happy and as busy as usual, now writing in half a dozen blank books at my side, while we squat together like two tailors, on the earth, chairs being unknown in this country. I hope you will find in him a better scholar, though not a better man, than when you left him. He is become a good mineralogist, and practically, a good botanist; has acquired an extensive knowledge of nations, and will certainly never regret either the time, or the expense, he employed in his travels.

CHAPTER VII.

Vienna—Paris—His return to England—Residence at Cambridge—Bust of Ceres—Tomb of Alexander—His marriage—Lectures in Mineralogy—Made Professor of Mineralogy.

THE tour, which had already continued three years, was now drawing to a close. On arriving in Germany, Mr. Clarke considered himself on beaten ground, and excepting a long letter from Hungary to his biographer unfortunately lost, containing an account of the Hungarian and Transylvanian mines, the latter of which they visited in company with the archdukes Antoine and Renier, nothing beyond a few short notices of his intended route homewards was afterward received by his friends. From these, however, it appears, that he arrived at Vienna the latter end of May, when he received the mournful intelligence of his mother's death, the grief for which kept him almost secluded in that capital for several weeks. During the latter part of his stay, however, he attended the Lectures of the Abbé Gall, on Phrenology, with which he was at that time greatly captivated, and visited all the most celebrated institutions and collections of the city, under the guidance of his friend, Mr. Hammer, the distinguished oriental scholar already mentioned, whom he had met at Cairo; by whose assistance he was also enabled to make some considerable additions to his minerals and manuscripts. From Vienna he set out for Paris in the beginning of July, and in consequence of a previous arrangement, which the short peace of Amiens afforded an opportunity of carrying into effect, the author of this Memoir left England about the same time to meet him. By the mistake of a banker at Paris, the proposed meeting was prevented until the beginning of September; and when at last it did take place, the appearance of Mr. Clarke was calculated to detract greatly from the pleasure which his friend had anticipated. His health was evidently broken by the fatigue and sickness he had encountered in his journey, and his spirits were at times exceedingly depressed by the loss of his mother. It seemed, for the moment, that every tie which bound him to his native land was weak in comparison of that which had just been broken; and his heart, instead of dilating as it was wont to do, at the prospect of the British shore after a long absence, shrunk fearfully

within him at the thought of revisiting a country where he had no longer a home to receive him, nor a mother to welcome him. Of his singular affection for his mother no one who has read his letters will need to be reminded; but it is an act of justice on the part of one who knew her well to state, that her excellent and amiable qualities amply merited all the kindness and attention with which it was repaid. It was not natural, however, that this state of depression, either mental or corporeal, should continue long. The comparative ease, and regular living which he enjoyed at Paris, soon restored him in a great measure to his former health and appearance while the number and variety of interesting objects at that time assembled at Paris, with the delight of meeting again some of his early friends, and the society of the most eminent literary men of that capital, soon dispersed the gloom which hung upon his mind. Among the latter were the Abbé Haüy, Mr. Faujat de St. Fond, Lecturers in the Jardin des Plantes, General le Grange, General Andreossi, and several other members of the Institute, to whom he had been known in Egypt. With all of these, the quickness of his understanding and manners, and the eagerness of his philosophical inquiries, heightened exceedingly the interest in his character, which the report of his travels had begun. They formed occasionally part of an agreeable and instructive society, English and French, which met at supper almost every night at his hotel; and as some of them were men of eminence under the consulate, and cordially disposed to use their influence in his behalf, many private collections in Paris, as well as other objects of great interest, not usually shown to strangers, were open both to himself and his friends. By the Abbé Haüy in particular, to whom he attached himself as a pupil and a friend, he was treated in return with a degree of confidence and kindness, which was not less instructive than it was gratifying to him. Besides the advantages he derived from the public Lectures of this Professor, in the Botanic Garden, which he regularly attended, he was indebted to him for much private information upon the theory of crystals, a difficult and interesting branch of mineralogy, which owed much of its development to the Abbé, and with which Mr. Clarke then for the first time became acquainted. Nor did his friendship, or the benefits Mr. Clarke derived from it, end here. It was supported by frequent communications till the Abbé's death, as well as by many reciprocal attentions to each other's friends—and the readiness of the Abbé to attend to his old pupil's queries after he became professor, was productive of many curious discussions, which are still preserved in a

mass of mineralogical papers, collected and arranged by Dr. Clarke himself. Among these occupations and pursuits, Mr. Clarke lingered till late in the autumn at Paris ; detained there, however, not more by the interest he took in them, than by the indescribable dread of returning to England, which again revived as the time approached : at last, however, in the beginning of October, the party set out for England together, and Mr. Clarke having restored his fellow-traveller (Mr. Cripps) into the hands of his friends in Sussex, who received him as one risen from the dead ; and having made a painful pilgrimage to his mother's house, at Uckfield, where not a trace of his family remained (for his sister was married and settled in another county,) prepared to take up his residence at Cambridge before the division of the term.

Thus ended a journey, which, whether we consider the extent and variety of the countries traversed, with their singular political relations and situations at the time, the treasures of every kind that were collected, or the celebrity acquired, may perhaps be deemed as remarkable as any which modern times, pregnant as they have been with instances of this kind of merit, can boast. It is to his own elaborate work, indeed, for which the results of his maturer labours were naturally reserved, and on which his reputation with posterity must ultimately rest, that the reader ought to be referred for the proofs of this assertion ; but as this is not accessible to all, his biographer is unwilling to dismiss so important a period of his life, without calling the attention of the reader to the character of those resources and attainments which were displayed in it. Of his general qualifications as a traveller, it may be said, that they were at this time of a much higher cast, than when he made his first journey to the continent. Without having abated a single tittle of his unconquerable spirit, he had gained much on the side of judgment and experience ; while his later studies, particularly those at Cambridge, had enlarged the sphere of his observation, and added considerably to the strength, as well as to the variety of his remarks. To affirm, indeed, that his knowledge was now at its height, or in any respect comparable to what he afterward attained, would be injurious to his reputation, and unjust to the memory of a life, of which, from this date, every year abounded more and more in labours than that which had preceded it ; but, to say the least, it was even then more than sufficient for all the purposes of inquiry and research ; and all his other qualities, with the exception of his health, which time would not have improved, were in their full vigour and perfection. Of the buoyancy and elasticity of his mind under difficulties and dangers, of the ex-

erion, industry, and zeal, displayed by him under every circumstance of the journey, it is difficult to speak too highly; and in the sagacity and quickness with which he discovered objects most worthy of attention, even in those departments of literature with which he was less conversant, and the ingenuity and perseverance he displayed, for the acquirement of such as could be acquired with honour, he was superior to every traveller of his day. Considering, indeed, how few and scanty were the means placed at his disposal, how little aid he derived from diplomatic influence or authority, or from any public men, or body of men, how frequently he had to struggle, even at the most critical moments of his researches, with fatigue, sickness, and privations, his acquisitions in the various departments of antiquity, art, and science, must be considered as marvellous. He had despatched to England more than seventy cases of his own before he left Constantinople, while his companion had upwards of eighty, obtained under his advice and influence. In this manner the whole of his liberal income from Mr. Cripps was expended; and, when that failed, that he might not interrupt the career of his acquirements, he sold his Italian collection, to supply fresh resources; prompted, not by a sordid spirit of traffic, as his whole life evinces, but by a genuine love of science, which was his ruling passion, and a patriotic desire of adding to the literary riches of his country. Even in botany, of which he was ignorant as a science, it is surprising how much he did in this journey, towards extending the knowledge and enriching the collections of his countrymen. Besides the plants which he collected in every country where he trod, among which were many new species, he brought to England two entire Herbariums from the two extremities of Europe—one from Lapland, and the other from the Crimea.

That he had faults at this time, that his conclusions were often too sweeping and too hasty, and that his feelings were sometimes suffered to take too free a course, even in matters which were more immediately within the province of reason, it would be equally vain and uncandid to deny. But these faults appear but rarely, while the general accuracy of his remarks is daily confirmed by unquestionable authority—by the reports of travellers who have visited the same countries since, by the numerous extracts from his pages in works of argument as well as taste, by the growing weight, attached to his authority since his death, and finally, (if his biographer may be permitted to suggest it,) by that more accurate examination of the papers connected with this tour, which his present mournful duty has imposed upon him; among which there

appear so many full and well-assorted documents, obtained from the most authentic sources ; so many references to local authorities, to the habitats of plants, to the situation and distribution of minerals, and to catalogues of books and natural history ; as to make it manifest, that whatever may be the value of the inferences and illustrations, which his own learning and the communications of his friends have since added to his travels, their chief merit and interest must be traced to the wide scope of his own observations, the extent and industry of his inquiries, and the fidelity with which the results of them were recorded at the time.

The documents which follow, though subsequent in point of time, will serve to throw light upon these observations ; the first a kind and playful note to Mr. Cripps, noticing some results of their botanical researches ; the second a letter to Mr. H. D. Whittington, containing a set of rules for travellers, evidently founded upon his own practice, and showing what it was.

To John Marten Cripps, Esq.

Original discoverer of the Convolvulus of Ineada, &c. &c. Gothic Cottage, Wimbledon Common, Surrey.

HARLTON.—

"I have the satisfaction to inform you, that the list of new discovered species found by us in Greece, already amounts, according to Lambert's list, to sixty. As I am referred to in naming them, I have insisted upon tacking your name to one of them, a tall, robust shrub ; a new species of convolvulus. This I have inserted in my travels under the name of *Convolvulus Cripsii*. Lambert had already given mine to a little veronica not bigger than your thumb—*Veronica Clarkiana*. I wrote to say, they should be engraved together in the same plate, for they grow together in Turkey. He objects to this, as the veronica, he says, will look like a speck, beneath the broad foliage of the tall convolvulus. I have, however, sent to say, this is my wish, that it may be an emblem of the journey undertaken under your auspices, and that I may be seen to blossom beneath your sheltering branches. You must have a drawing made by Sowerby, and coloured, of the CONVOLVULUS CRIPSI, for your drawing-room, and put the little veronica into a tooth-pick case."

To H. D. Whittington, Esq.

CHRISTMAS-DAY.

"When I recollect that about this time you were to be at Petersburg, I regret that I have delayed writing so long; but I had no letters to offer you for Russia, as you must be well convinced; nor shall I trouble you with a visit from the police, by adding my name to this; so you must guess who I am, for I am aware (as of a certainty) that this letter will be read by the virtuous agents of the Russian government, before you will be permitted to see a line of it.

"Things remain as you left them; now and then a gownsmen is smuggled into the other world, and his death attributed to any other cause than to the fever. Two men of Magdalen College have deceased, and the physicians swear they died of the *aurora borealis*. Fiott, after his long travels, has been here, and gave me a most interesting account of his route. He actually entered the tombs of the Macedonian kings at Edessa, now called Vodina, near Thessalonica; make these sepulchres, therefore, a main point, for Fiott wrote no account of them. Be pleased also to remember that you are never to conceive that you have added enough to your journal: never at liberty to go to sleep, because you are fatigued, until you have filled up all the blanks in it; never to go to the bottom of a mountain without also visiting its top; never to omit visiting mines where there are any; never to listen to stories of banditti; nor in any instance to be frightened by bugbears. Remember the arragonite of the grotto of Antiparos, in stalactites, radiated from their centres; also the famous bass-relief which is in the castle of Cos, facing the sea, and of course the manuscripts of Patmos. Do not load yourself with brass medals, but get all the fine silver and gold medals that come in your way, at the rate of the value of double their weight. Live, as much as you can, after the manner of the people of the country where you happen to be. Endeavour to get specimens of the famous tree-pink (*Dianthus Arboreus*) from Scyros, and send some of the seed of it to me as fresh as it can be conveyed: if kept until you return, the seed will not grow. Turn all marbles which you find lying flat on the soil. Visit all the goldsmiths or silversmiths. Take a fac-simile of the inscription in Tempe. Ascertain the heights of Parnassus, Hymettus, and the European Olympus. Dig near the temple of Bacchus, at Naxos. Have with you a boat-compass and a telescope, in Greece. Any thing may be done by bribing the local aghas.

"Burekhardt is at Grand Cairo, and Gell at Naples.

"If Guaringhi the artist be yet living in Petersburg, remember me to him; the same also to Bush the gardener, at Tsarsko-Selo.

"All here unite in every good wish and kind remembrance for you, not only of this season, but of all 'times, tides, and ends.' *Xaiet.*"

The narrative left Mr. Clarke preparing for his permanent residence in Jesus College, from which there was no longer any thing to divert him: it was, in fact, his only home; but had this been otherwise, Cambridge would undoubtedly have now been the residence of his choice. With the progress of his travels his ardour for science had increased, and that which was before the prevalent, had now become the habitual principle of his mind. Hence it came to pass, that while the glimpse he had before enjoyed of the literary advantages of an academic life, had remained fresh and vivid in his mind, the little rubs and vexations he had experienced there were forgotten. Besides, he could not but feel that the character in which he was about to appear in the University, was widely different from that which he had sustained before. In every part of England, his reputation as a traveller had preceded him; but in Cambridge in particular, where his letters had been frequently read and canvassed, and the nature and extent of his enterprises had been better known, the estimate of his talents had risen very considerably, and a favourable reception was secured for him with those persons on whose good opinion he was disposed to place the highest value. Here, therefore, in the latter part of November, 1802, he commenced a residence, which, under various circumstances, was continued almost without interruption for nearly twenty years, till the period of his death: during which long time, his attachment to the place seemed to increase with every year that passed over him, nor did there exist within its precincts a man more anxious for its welfare and reputation, more attached to its distinguished members individually and collectively, more desirous of encouraging every species of honourable talent, and every branch of useful information, more prodigal of his own exertions, or more disposed to honour those of others.

For some time he took no college office, nor was such an employment essential to, or even compatible with his views,

for Mr. Cripps still continued with him as his pupil, and the engagements arising out of his travels, were quite sufficient to occupy all the time he had to spare: among these his first care was to collect and examine the various cases and packages which had been awaiting their arrival at the different custom-houses of the country; and considering the remoteness of the places from which they had most of them been despatched, and the variety of conveyances to which they had been intrusted, it was matter of just congratulation, that so little either of loss or injury had been sustained. One accident indeed had occurred which had nearly been of the most serious importance. The ship *Princessa*, principally freighted with their most valuable acquisitions from Greece, was cast ashore during their absence, upon the coast of Sussex, near Beachy Head, and not far from the estate of Mr. Cripps, where his father was then residing. This gentleman having heard of the accident, and knowing that there were several packages on board for his son, hastened immediately to the spot, and by his timely interference and care, secured such articles as had received no injury, and saved from farther damage those which had suffered from the wet. Among the former was the celebrated bust of Ceres, and other valuable marbles; among the latter, the beautiful manuscript of the *Arabian Nights*,* which had cost them so much time and pains to obtain at Cairo, and which, though sent back to Constantinople for the purpose of being restored, was never afterward of any value. Besides this, several cases of drawings and plants were broken up in the confusion, and their contents dispersed; and though Mr. Cripps continued to receive infor-

* It is a curious fact, that Mr. Hammer, who was commissioned by the Austrian government to purchase antiquities in Egypt, and who was Dr. Clarke's competitor for this manuscript, at Cairo, and afterward for the fragment of a statue among the ruins of Saïs, in which he conceived himself to have been out-manœuvred by Dr. Clarke, says in a letter to him afterward, of the manuscript, without knowing its fate—"I told you I ought to have had it, and it will never favour with you;" meaning, that it would never prosper with him. This gentleman, a linguist of the highest merit, was recommended by Dr. Clarke to the author of this Memoir, at Cambridge, in Dec. 1800, during his own absence. Of the Saitic statue (now in the Public Library) he then said nothing, though he afterward complained in the *Vienne Gazette*, of Dr. Clarke's mode of acquiring it; but much amusement was afforded by his account of the keenness and adroitness of our traveller in pursuit of the MS. *Arabian Nights*, at Cairo. It happened that Mr. Pitt was at this time upon a sort of canvassing visit in the University, and saw Mr. Hammer; he heard of him first at a supper at Jesus Lodge, where in the company of some young travellers, particularly Mr. Malthus, &c. he was induced to unbend in a very easy conversation respecting Sir Sidney Smith, the massacre at Jaffa, the Pacha of Acre, Clarke, Carlisle, &c. The next day, he desired to be introduced to Mr. Hammer at the commemoration dinner at Trinity, and continued with him his inquiries about Sir Sidney Smith; Mr. Pitt spoke highly at the supper, of Carlisle's translations from the Arabic, the poetry of which he thought beautiful, and some of them he seemed to know by heart.

mation respecting some of the articles at Newhaven, for several years, he never could trace them to their possessors.

Of all these treasures, the first place in Dr. Clarke's mind was given to the Ceres; and this, not only on account of the high distinction to which the statue was destined in the University, but for the rank he assigned to it, among the monuments of the purest age of Grecian sculpture, and the many classical associations connected with its history. By the liberality of the government it was allowed to be taken out of the custom-house, duty free; and when at last a place had been assigned to it, by the University authorities in conjunction with the donors, and the proper preparations had been made for its reception, it was securely placed upon its pedestal, with all due form and honours, in the most conspicuous part of the vestibule of the Public Library, on the 1st of July, 1803; and the names of Dr. Clarke and Mr. Cripps were, by the desire of the University, inscribed upon the base. This event was a source of great gratification to Mr. Clarke—it was the triumph of an honourable wish, which having been conceived at the moment of its successful departure from Eleusis, had been fondly cherished by him ever since, and was now accomplished in a manner the most agreeable to him. Indeed it was a subject of fair congratulation, both to himself and Mr. Cripps, that this celebrated monument, whose removal had been attempted in vain by one of the most powerful ambassadors at Constantinople, and which was guarded no less by the superstition of the neighbouring inhabitants, than by the natural obstacles of its own weight and magnitude, should have been transported in safety to the University by the exertions and address of two of its private members. The public appearance of the statue was quickly followed by a tract from his pen, which naturally grew out of the transaction, and was indeed important to the illustration of it. In this little work, which is entitled, ‘Testimonies of different Authors, respecting the Colossal Statue of Ceres,’ the monument in question is clearly proved to be the very individual bust, described as lying at Eleusis, by Wheeler and Spon, Pococke, Chandler, &c. and considered generally as the representation of the goddess. A learned distinction is also drawn between the ornaments and costume of the Canephoræ and Cistophori, and those of the Eleusinian goddess, with which they had been confounded; and a short account is added, of the manner in which the property of the travellers in the statue had been acquired, and the means by which its removal to a vessel in the Piræus had been effected. The pamphlet was published in the summer of 1803, and is thus noticed in a letter to his biographer, the closing

lines of which cannot fail of raising many pleasing recollections in the minds of those who were acquainted with Dr. Clarke's College rooms and their ornaments.

To the Rev. William Otter.

"JESUS COLLEGE, July 10th, 1803.

"The Ceres is more and more admired; as for our master, he pulls off his gown and dances round it. The vice-chancellor sent for me, and communicated the thanks of the University, and desired them to be sent in due form to Cripps, and added, that the University insisted on our names being cut on the pedestal. My little pamphlet is not to be distributed gratis: the good Tyrwhit hit upon a plan, of which I envy him the proposal. The price is to be low, but the amount of it is to go to the poor man who fell from the scaffold and broke his ribs. This will bring twenty-five pounds to a day labourer, at one lump, and as the pamphlet will always sell, as long as lions prowl about the statue, it will be a little fund for his family.

"I fear I shall never have courage to quit the quiet of this place for Brighton. We have such serene evenings, and green walks, even Tyrwhit is now seen, basking on our grass plot, and ——— keeps the Gyps in fine order. We are only three in the whole college. It is like a sweet calm, in a good port, after a storm, and my days fly like gentle breezes, swift, but silent; whispering as they pass, repose and peace!

"We dine at four, and still have time for a walk afterward. I cannot afford such a lounge in the morning, but read and scribble till I get fined for being too late in hall. At breakfast I should sigh, if I were not in my fourth decade, old and calous; when the thought comes across me that Otter will not call. I have nobody to show my nonsense to now; and, what is worse, I have not had a single letter. Pshaw! this last sentence smells of the sizing bill, which is now lying before me; potatoes, beef, and broth! I should not have written it before they closed the shutters, and bolted out the breezes. May God bless thee! Here's your health ———!!

"And oft, as from the mountain's brow you bend,
Where northern moors, in solitude extend:
Where scarce a hut, through all the dreary waste,
Invites brave Blue Beard to his night's repast;
Say, will your thoughts to Rhadegunda roam,
And view the wand'rer in his peaceful home?

While fancy waking, paints the well-known scene,
 The walls monastic, and the college green,
 The chamber hung with painting's deathless dyes,
 Where breathing canvass bids old Shakspeare rise,*
 Where Edwin's soul in rapture seems to soar,
 The peasants smoking at the cottage door,
 The tints which Venice from a Titian drew,
 De Heem's warm touch, and Herman's silver hue,
 Loda's pale phantom, on the stormy heath,
 Thy shipwreck, Vandervelde ! and gulf of death ;
 Or when contrasted, 'midst serene skies,
 The gallant vessel calm at anchor lies ;
 Sebastian Bourdon's sweet maternal smile,
 Bercham's still flocks, and Steenwycke's hallowed pile !

" Oh 'tis wonderful what effect a glass of college ale has upon a college muse ! "

His return to college after the vacation of this year, was marked by many circumstances calculated to gratify his ambition, and to reward his labours. The statue of Ceres had succeeded not only in exciting a high degree of interest among the members of the University, and its casual visitors, but had attracted to Cambridge several men of letters and artists, who came there solely for the purpose of studying it, or of making designs from it. Among these may be mentioned particularly Mr. Flaxman, who afterward made a drawing of the complete figure, according to his own conception of it, which was engraved by Tomkins, for a subsequent work. But this was only a prelude to those more honourable and more appropriate marks of approbation which the University had in store for them. In his opening speech to the senate, the vice-chancellor, Dr. Davy, of Caius College, paid a handsome compliment to the merits of the travellers, and dwelt upon the credit which had accrued to the University from their labours and public spirit ; and before the winter had expired, a grace was passed unanimously in the senate, for conferring the degree of LL.D. upon Dr. Clarke, and that of M.A. upon Mr. Cripps ; and to mark with more distinction the sense of the University, in conferring these honours, a second grace

* This picture had for a while a singular celebrity. In the term before he made his journey to the north, he found it in a shoemaker's shop, covered with filth, and bought it for a guinea, and in the course of cleaning it he discovered, or fancied he discovered the features of Shakspeare in the subject, and the initials of Mark Garrard in the corner of the canvass. Under this impression, he got leave to exhibit it in the Public Library, and invited the University and the neighbourhood to examine it as an original portrait of the bard. Nor will those who remember the fact, easily forget the numbers which the exhibition collected.

was subsequently carried, to defray the whole expense of Dr. Clarke's degree from the University chest.

From these academic honours and occupations his attention was for a while diverted to cares less peaceful, though happily of a not less innocuous kind, in which he was also destined to act a conspicuous part. The close of the year 1803 was rendered remarkable by the patriotic spirit displayed by the nation at large, under the threat of a French invasion, and particularly by the eagerness with which men of all ranks and professions, among the well-born and the well-educated, hastened to prepare themselves by military exercises, for participating in the defence of the country. In these exercises, however alien from their usual avocations, the two Universities were by no means backward to partake. At Cambridge, four companies were enrolled, including gowmsmen of every rank and degree, and almost of every age; and as Mr. Clarke was always foremost in every plan which was calculated to rouse the energies, either mental or physical, of the University, he was exceedingly useful in the formation of the corps, and was eventually appointed to one of the companies in it.

The spirit displayed upon this occasion is a curious feature in the history of the times, and his own description of the drill, in a letter to Dr. Satterthwaite, will perhaps not be thought uninteresting.

To Dr. Satterthwaite.

“JESUS COLLEGE, CAMBRIDGE,
November 16, 1803.

“Dear Sat.—I have had so much to say, and so much to thank you for, that I thought it quite necessary to sit down in form and write on a folio. But in this way a letter is postponed from day to day, and never written. So, therefore, take me as I am; just come from practising the light infantry manœuvres, over all the hedges and ditches, towards Madingley; wet, muddy, and oozing at every pore. My brother has been here, and passed some time with me. Malthus left me this morning; but still new lions pour in—*n'importe!* The Bursar talks of building a new Combination Room; and certainly we must have a new table in the hall—we have not room even for the members of the college, and still less for lions, who always occupy considerable space.

“I thank you for the handsome manner in which you have

complied with all my requests respecting the Plumbago Mine ; for the case you have sent ; and the answers you have given to all my queries. For it was of importance that you should not only go up the level, but absolutely ascend the shaft, however fatiguing it might be ; and although my questions might not all appear of importance, I shall convince you when we meet that they were essential.

“At present nothing is talked of in Cambridge, but the drill—who shoulders best ; and who trod down Beverley’s heels in close marching. Yesterday we had a sort of sham fight, on Parkhurst, and they all allow we do better than the Town Volunteers. Colonel Hare came to see us, and said we were the finest body of men he ever saw ; and that he would rather command the University corps, than any regiment in England. Certainly our grenadier company attracts the notice of all the ladies. Among them you will see O—— and C——, in smart light infantry jackets, with black stocks, looking as fierce as Mars. We paraded through the streets, from Clare Hall to Parkhurst Piece, with a full band of music. The corps is intended as a nursery of corps, to supply the nation with officers and drill sergeants. We are all officers in turn. At present the corps consists of four companies of thirty men in each, commanded by Captain Bircham as general, and by Thackery, myself, Johnson, and Dr. Sill, with covering sergeants who succeed to our posts, when we fall into the ranks ; in the order you see here :

Woodhouse, Covering Sergeant.	First Division, Grenadiers.	Lord Palmerston, Covering Sergeant.	Second Division.	Piott, Covering Sergeant.	Third Division.	Bishop, Covering Sergeant.	Fourth Division, Grenadiers.
—	—	—	—	—	—	—	—
Thackery.		E.D. Clarke.		Johnson.		Dr. Sill.	

Captain Bircham.

“Now you may review us yourself ; and imagine we are giving the general salute, with the band playing ‘God save the King,’ or the ‘Cambridge University March.’ Don’t you remember the Swedish air, ‘On lofty Mountains roaming?’ You did not like the words should be made a *sing song* ; so I have adapted new words more appropriate ; and I enclose them as they were sung at the concert here, a few nights ago. I have also enclosed the answer of the heads to the plan I laid before them for drilling the laymen members. You have little conception in your peaceful retreat, what high words, and hot

water, has attended the formation of this University corps; nor of the open and insidious attacks it has received from avowed enemies, and pretended, lukewarm friends. They voted us 200*l.* from the University chest lately, towards defraying the expenses of the drill. I could have wished the corps had thanked them for this handsome offer, and declined accepting it; but there are some among us on whom the expense of arms, accoutrements, and uniform, might fall too heavy. But what will your surprise be, when I tell you, that the first person who put down his name for a musket, under the plea of poverty, was the son of a nobleman! I hope he will not engrave his name on the stock.

"The Combination is now too numerously attended to be comfortable; but the greatest harmony prevails, and we live like one great family. I believe so large a circle with so much unanimity would not be found elsewhere. I have not heard a single expression of ill will, either openly or ambiguously, since we met. We have entirely abolished sizing parties; which you will feel the advantage of in a very high degree. There is a Combination Room every night. If a man has no other engagement, he is sure of finding a comfortable rubber, and a party of friends; and if he does not like cards, there are newspapers and reviews for his amusement. At supper we order what we please; except on a Monday, *the gala night*; as commemorating the old Club—on that night, we have a supper prepared, and all make a point of attending.

"Young Wilkins is returned from Greece, and is going to publish his drawings of 'Ruins in Sicily,' by way of supplement to 'Stuart's Athens.' Miss Wilkins has just finished a most magnificent drawing, representing the Ceres entirely restored to all her original majesty, as seated in her temple at Eleusis. I intend to engrave it in the next edition of the *Testimonies*; which will appear with the *Testimonies respecting the Tomb of Alexander*, and both form one volume.

"There is nothing I dislike so much as that letters, containing mere gossip, should lie about, or become placards; therefore, I earnestly beg you will burn this. At the same time, it will be particularly necessary for you to make no other copy of the following poem, than what the tablets of your memory may contain. It is the most beautiful thing I ever heard. I give it you from memory myself. My brother is publishing a new edition of the *Shipwreck*, and he applied to Bowles for a few lines to add to the life of Falconer. Bowles read his letter as he was lounging on the platform at Portsmouth, looking out to the Isle of Wight; and going to his room, added this exquisite sonnet to his answer:—

ON FALCONER, AUTHOR OF 'THE SHIPWRECK;' LOST AFTERWARD
IN THE AURORA.

What pale and bleeding youth,—while the fell blast
 Howls o'er the wreck, and fainter sinks the cry
 Of struggling wretches, ere o'erwhelmed, they die—
 Yet floats upborne upon the driving mast?
 Oh, poor Arion! has thy sweetest strain,
 That charm'd old ocean's wildest solitude,
 At this dread hour, his waves' dark might subdued?
 Let Sea Maids thy reclining head sustain;
 And wipe the blood and briny drops that soil
 Thy locks, and give once more thy wretched shall
 To ring with melody! oh, fruitless toil!
 Hark! o'er thy head again the tempest swell!
 Hark! hark! again the storm's black daemons yell!
 More loud! the bellowing deep reclaims his spoil—
 PEACE! and may weeping Sea Maids ring thy knell!"

Having now sufficiently provided for the security and credit of the statues and marbles more immediately under his control, the next object connected with his travels to which he directed the public attention, was the celebrated Sarcophagus, now in the British Museum, captured from the French at Alexandria. It is well known how instrumental Dr. Clarke had been in discovering this noble monument of Egyptian art, when it had been clandestinely embarked for France, on board a hospital ship, in the port of Alexandria, and in rescuing it from the hands of General Menou, and the French Institute, who clung to it with a degree of obstinacy almost incredible: and it was very natural that the interest he had taken in it in Egypt should revive with its arrival in England; especially as the origin of the monument soon became the subject of much speculation and perplexity among the learned, and Dr. Clarke conceived himself to be possessed of evidence calculated to throw light upon it. Under this impression, he drew up, in 1805, a Dissertation on the Sarcophagus in the British Museum, brought from Alexandria. It was inscribed to Lord Hutchinson, under whose authority he had acted in Alexandria, and the main object of it was to vindicate the pretensions of the monument to the title of the tomb of Alexander. To this hypothesis he had been first led by the name it bore (the tomb of Alexander) among the most ancient race of the neighbouring inhabitants, coupled with the extreme veneration felt for it as such by the Turks and other persons of every description in the city of which this hero was the founder; and having been afterward partially confirmed in his opinion by the reports he had in the works of early travellers, as well as by the conversation of learned men on the continent, and at last more decidedly by an accurate examination of such classical authors

as had treated of the subject of Alexander's death and burial, he collected his proofs and arguments in a manuscript, which, after being handed about among his friends, in 1804, was by their advice published in the following year, under the title already mentioned. The work had been placed in the hands of Lord Hutchinson, with a view to its being printed by the Antiquarian Society, but was afterwards withdrawn at the suggestion of his friends, who thought it would appear more expeditiously, as well as advantageously, from the University press, the managers of which undertook to print it.

"It was ornamented with an accurate coloured engraving of the tomb, from a drawing by Alexander, and accompanied with several appendices, in one of which was inserted a learned and ingenious illustration by Dr. Parr, of a Greek inscription found among the ruins of Tithorea by the author; and being the first book in which the name of Edward Clarke had appeared in the titlepage (all his former publications having been anonymous,) it was otherwise got up with great care, and at no inconsiderable cost. But this over-nursing was in one respect injurious to it. The subject, though excellent for a pamphlet, was neither popular nor comprehensive enough for the expensive form in which it was thus obliged to appear (the price was eighteen shillings,) and the introduction of such topics as the ruins of Sais and Tithorea, however interesting in themselves, was so far injudicious, that it injured the unity of the piece, and added to the expense without furnishing any ground for the argument: thus, notwithstanding the advantages under which it came out, the Work was by no means lucrative, either to himself or his publisher, Mr. Mawman, in whose hands a large number of copies remained for many years. To the author, however, it was productive of essential advantage in many ways. By the few who read it, it was, for the most part, well received and highly estimated; among whom are mentioned by himself, Porson, Parr, Dr. Zouch, Lord Aberdeen, Dr. Henly (Principal of Hertford College,) Dr. Knox (his early tutor,) Mr. Tyrwhit, Mr. Matthias, &c.; all of whom gave their countenance and approbation, and some their assistance or advice in the work. It was the means, also, of making him more favourably and more intimately known to other men of learning and genius, whose friendship he never lost. Above all, it gave him confidence in his own powers, and enabled him to stand upon much higher ground, when soon afterward he had to treat with the booksellers for his travels. Nor can it be denied, that his position was maintained with great ingenuity: by many learned persons, the proofs were considered conclusive, as their letters

show ; others, more reserved, readily expressed their surprise that such a mass of evidence existed ; and all were disposed to allow, that a vague and obscure tradition had been elevated in his hands to the rank of a learned and probable conjecture. Of the congratulatory letters addressed to him upon the occasion of this Work, one only will be given. It is from Dr. Knox, and has been selected not less for the good feeling displayed in it, than because it was particularly gratifying to Dr Clarke himself.

“TUNBRIDGE, March 28th, 1805.

“Accept my sincere acknowledgments for your valuable present, rendered still more valuable by your kind remembrance of me. It is indeed highly gratifying to me, to see one of my scholars advancing in fame as you do ; and not forgetting the guide of his boyish studies. It is one of the sweetest rewards of my laborious profession to see eminent scholars shining in the world, and acknowledging that they owe something of their lustre to him who assisted them in the elements of literature. I congratulate you on your success, and say, ‘*Macte, puer, sic itur ad astra.*’

“I am highly pleased with your very curious book : it displays great ingenuity, and must command the attention and respect of all lovers of classical antiquity. I do admire that ardour of mind which overcomes all obstacles, in pursuit of its favourite and laudable objects ; I well remember the symptoms of it when you were at school ; it constitutes what I call literary heroism.

“I shall make it my business, when in London, to inspect the Sarcophagus ; I shall touch it with a kind of awe ; by your assistance, I shall be an elegant spectator of it.

“My family all unite in best respects to you, with dear Sir,

“Your much obliged,

and faithful, humble servant,

“V. KNOX.”

Some objections to the hypothesis had been started in the Monthly Magazine, before the publication of the Work, which were answered by Dr. Henley, in an Appendix to it ; and others appeared afterwards in the Literary Journal, to which Dr. Clarke replied himself in a letter to the Trustees of the British Museum. This again gave occasion to several communications with Professor Porson* and Dr. Parr, upon the

* Where the chain of his evidence becomes defective after the destruction of heathen temples and monuments, in consequence of the establishment of Christianity by

critical meaning of several Greek words which had been introduced into it; and also with Dr. Henley, upon the sacred writings of the Egyptians, in all of which he took great interest; and it will convey some notion of the extraordinary activity of his mind at this period, to add, that in the very midst of this controversy (Easter, 1805) he composed and sent to press a treatise on Mineralogy, principally intended for students, of which the following notice is given in a letter to Dr. Henley:—"I have already sent another work to the press, very different in its nature, which will be mere play to me this Easter vacation. It is 'an easy and simple method of arranging the substances of the mineral kingdom;' by which I hope to make mineralogists, as fast as Bolton makes buttons. The introduction only is addressed to persons rather above the class of students, and is intended to develop the theory of elementary principles, the cause and origin of the fluid matter of heat, the formation of atmosphere, &c. &c. It is a portable volume, small and pleasant for travellers."

The work was never published, and its existence is scarcely known to any of his friends, but one or two copies were found among his papers, and a slight view of it is sufficient to show, that it must have cost him considerable time and labour, at the moment his hands appeared to be full of other things. But this was not all; not many months before, he had been appointed to the office of Senior Tutor of Jesus College, in the room of the author of this Memoir, who had vacated it by marriage, and thus a new class of occupations and engagements was thrown upon his shoulders, of the greater part of which he had no previous knowledge or experience, and of some (business and accounts) a great horror; and when to all this, it is added, that he had taken another pupil in the room of Mr. Cripps, and that his time was liable to be broken in upon by innumerable strangers of all descriptions, foreigners and natives, who pressed upon him with letters of recommendation, and always went away delighted, it will create no surprise to learn, that the number and variety of his engagements during this year furnished matter of wonder, and sometimes of amusement, to his friends. Notwithstanding all these distractions, by which his time was frittered away, the College, with the

imperial authority, the Professor's reading furnished him with a seasonable argument: Herodian mentions Soros, and St. Austin tells us, a sarcophagus is what all the Greeks called soros: so Caracalla lays his mantle *in soros*, or upon the sarcophagus. In confirmation of this, is an inscription copied by Dr. Clarke at Alexandria Troas, of the time of Alexander, as Porson judged from the lettering, in which the sarcophagus is called soros:—

"Aurelius Soter constructed this soros (sarcophagus) for himself."

assistance of his experienced friend and coadjutor, Mr. Caldwell, went on prosperously in his hands, till he was happily relieved from it by his marriage, in the spring of 1806 : upon which occasion, the noblemen and fellow-commoners of the College, presented to him, through the hands of the Marquis of Sligo, a piece of plate, accompanied by a handsome letter, expressing their sense of his kindness and attention in his office, and their regret for his loss.

The lady who was the object of his choice was Angelica Rush, the fifth daughter of Sir William Rush, of Wimbledon, and the cousin of his pupil, Mr. Rush, of Elsenham. It was, strictly speaking, a match of affection on both sides, and throughout the whole progress of it, was marked with a more than usual portion of those anxieties and fears which are apt to accompany such arrangements, although happily exempt in the sequel from the disappointments and inconveniences which sometimes follow them. At first, indeed, the connexion was thought very flattering ; the lady was beautiful and accomplished, her father a man of large fortune, and Mr. Cripps, Dr. Clarke's pupil, was about to marry the third sister. But when the circumstances and dispositions of the parties had been fairly considered, in relation to each other, the aspect under which it appeared to his friends was very different. A wide disparity of years, (Dr. Clarke's age was double that of the lady,) a real difference of habits, a presumed discrepancy of taste, and, worst of all, a very narrow income, were the prominent features of the case, as they presented themselves uniformly to those whom he consulted ; and making every fair allowance for the chances of life, and for that powerful stimulus to exertion which the wisdom of Providence has happily annexed to a prolific marriage, it was impossible for them to regard the match, or to represent it to himself in any other light than as a most imprudent one ; insomuch that, notwithstanding the powerful influence by which he was impelled, (for it was not likely that a passion which is apt to animate even the cold and sluggish, should burn with an ordinary flame in a heart so susceptible as his,) there were moments in which he himself was so strongly touched with the thought of involving in unknown difficulties a person to whom he was so much attached, as to undergo the most painful struggles ; during which, many letters tinged with his romantic spirit, and marked with his peculiar mode of expression, but always generous and honourable, were written by him to his biographer.

From the moment, however, that he was convinced of the lady's firmness, he looked no farther back, but giving himself

up entirely to the stream of his affection, and relying upon his own exertions, in some shape or other, for a better provision, if it should be needed, he pressed on his marriage with all the despatch imaginable; and as no difficulties were now thrown in the way by her parents, they were married on the 25th of March, 1806. The ceremony was performed in London, by the Bishop of Bath and Wells, and the events which preceded and followed it, amply justified the confidence he had placed in his own good fortune. During the short administration of the Whigs, he had been a candidate for the Professorship of Modern History, in which he did not succeed; but before the day appointed for the marriage arrived, the vicarage of Harlton, belonging to Jesus College, became vacant, and after some weeks of anxiety, during which his seniors were deliberating, the option at last came down to him; and having already determined to enter into holy orders, he was ordained by his old friend, the Bishop of Bath and Wells, in December, 1805, and immediately instituted to the living. But this was only a part of his good fortune. Not more than three years after his marriage, the rectory of Yeldham, in Essex, in the gift of Sir Wm. Rush, and tenable with Harlton, unexpectedly became vacant, and was presented to him. Thus he became possessed of a considerable income from church preferment, not any part of which he had calculated upon when he determined upon his marriage. "As to the living of Yeldham," he says, "I never knew of its existence until it came. I was like a man gaping in a hail-storm, and 'a pearl of great price' fell into my mouth, to my utter astonishment." In all other respects, the consequences of this union proved directly the reverse of what the calmer heads of his friends had anticipated from it. Before many months had elapsed, it was obvious that the character and disposition of Mrs. Clarke were precisely such as those who loved him best would have chosen for him, and that the habits of life she was forming were in perfect conformity with his own wishes, and suitable to the new fortunes and circumstances in which her marriage had placed her. So far from being desirous of public admiration, she was more attached to domestic privacy than himself; all her employments and all her pleasures were sought for and found at home; nor did she seem to have an expectation, or even a wish of any kind, beyond the sphere of her husband's fortune, or the circle of his employments, while the taste which was gradually displayed by her, first in the comforts and ornaments of his house, then in the embellishments of his work, and finally through the whole range of his intellectual pleasures, gave a

harm to her character in his eyes, which was perpetually varied and renewing, and appeared perhaps more delightful to him, because it was discovered and elicited by himself. Nor did the benignant influence of this union rest here; he was indebted to it for a better frame of mind, and a greater steadiness and consistency in his pursuits. In the whole character of the lady, there was a quietness and repose admirably calculated to soften that turbulence of spirit, which was at once the charm and the danger of his own, and which literary fame often stimulates, but rarely satisfies; while the suggestions of her plain and unaffected sense, openly but seasonably delivered, often called him back to calmer and juster views of things, and made him question the results to which his own sensibility was leading him. On the other hand, in the desire he felt of adding to the comfort and of providing for the necessities of his family, he had a strong and unfailing motive for his literary labours, which now began to wear a new and an additional value in his eyes; and there is the strongest reason to believe, that without this stimulus, his great work, the *Travels*, the fruit of so much painful labour, would never have been finished, and scarcely perhaps have been begun; not that his literary ardour would have been less, but it would have been more excursive and more ambitious of new paths, and, at all events, more philosophical and experimental. But, after all, the great beauty of the union was, that to the quiet habits of domestic life it induced, so favourable to the reception of Christian truth, and to the formation of Christian virtue, concurrent with the serious nature of the office he had undertaken, he was indebted for a more earnest application of the Scriptures to his own mind than had hitherto been remarked in him. Many proofs of this may be drawn from various parts of his works and life; but the most striking will be found under the pressure of the afflictions which clouded his latter days.

The report of his marriage was hailed by a distinguished classical friend, with the following complimentary verses:

E. D. CLARKE, LL.D.

Daphnidi suo Doctissimo Dilectissimo
Desiderio tam Cari Capitis
Graviter Commota
GRANTA

Lugubrem Hunc Cantum.

Ah fugis? aut nostrum frustra petis advena lucum?
(Sic Granta infidum Daphnida fide vocat:.)
Quis color hic croceus? nostras contrarius urbi
Tene adeo spretâ Pallada jactat Hymen?
Nec te noster amor, promissæ aut cura salutis,
Nec confecta gravi vulnere Granta movet?

Non sancta inspirat tales Rhadegunda* furorcs,
 Et monet insolito Gallus † ab ore sono.
 Præ veneris campo nunc Granta flumina sordent?
 Anna tuo frustra est munere dives ager?
 Aspice virgineo demessa ut pollice sarta
 Luget Eleusinio littore rapta Ceres!
 Quin Pellæa suo stupet umbra emota sepulchro:
 Fallor, an et nobis altera Thais adest?
 Moribus, ingenio, famâ dotabere virgo,
 Et novæ Angelicâ luce Medorus erit.

1805

Immediately after this event, he went to reside in Cambridge, where he hired a small house in St. Andrew's Street, and as his living of Harlton was only seven miles from the University, he constantly performed the duties himself.

CHAPTER VIII.

His Lectures on Mineralogy—Sale of Manuscripts—Of Medals—Removal to Trumpington—Publication of the first volume of his Travels—Other Engagements—Plan for the farther prosecution of his Travels—Return to residence at Cambridge.

THE course of Dr. Clarke's life now turns from this happy union to a department of his labours, which was always uppermost in his own thoughts, and, next to his Travels, obtained for him his highest distinction, as a literary man: viz. his Lectures on Mineralogy. The history of these Lectures belongs properly to this period of his life, for they commenced not long after his marriage, and were, in truth, one of the resources upon which he always seemed to rely, when the difficulties of a family were pressed upon him by his friends; but as they had been a favourite object of his speculations for many years, and were now only accidentally connected with this event, it will be necessary to trace them somewhat nearer to their source. It is well known to all his friends, that whatever temporary interest his works already published had excited in his mind, they were only the result of so much time and labour reluctantly withdrawn from mineralogy. During the whole course of his journey, this science, and the objects connected with it, obtained everywhere the greatest share of his attention, and had been cultivated by him with the greatest success; to which several circumstances had contributed. Low at that time, as

* Abbatisa Monast. Jes.

† Episcopus Alcock fundator Jes. Coll. Cant.

was this branch of literature in our Universities, it had risen under a variety of encouragement and patronage—the result of policy as well as taste—to a high degree of importance in every public establishment of education on the Continent; and, as Mr. Clarke brought letters of recommendation to the most eminent professors wherever he went (an advantage which his own spirit always contributed to improve), he was in all places cheerfully admitted to a participation of all the local discoveries or improvements, and supplied with specimens of all such minerals as they respectively produced. But this was not all; the course of his travels often led him to remote districts, particularly in the eastern and southern parts of Russia, not accessible to the ordinary mineralogist; and as he spared neither pains nor money in his researches, besides a very ample store of minerals more or less known, he brought to England several rare and valuable specimens, which were for some time almost peculiar to his collection: and it may be affirmed generally, that of all the fruits of his travels, his acquisitions in this department were infinitely the most precious in his eyes. To bring forward, therefore, this collection before the public eye, and with more advantage than his own limited apartments would permit, to communicate to others the lights which he himself had obtained and to disseminate throughout the University a portion of that flame which burnt within himself, were, from the first, wants infinitely more pressing in his mind, than the hope of reputation or advantage from any other quarter; and as the only obvious means of embracing at once these objects was the delivery of Lectures under the patronage of the University, it was to the attainment of this, that his best efforts, from a very early period after his return, were uniformly directed. But the task was by no means an easy one. The subject was little known, and less studied, and by no means popular in the University; nor was there any room suited to the purpose, but what was either preoccupied or appropriated; and, besides, there was an apprehension of the Lectures interfering with the Woodwardian professorship, at that time occupied by a gentleman for whom Dr. Clarke had justly a very high respect. By degrees, however, all these difficulties gave way. Every facility was afforded by the University to the plan; Dr. Martin, the Botanical Professor, gave up his room in the Botanic Garden, which his age and infirmities prevented him from using himself; and the Woodwardian Professor, whose proper department was Geology, so far from considering these Lectures as an interference with himself, kindly concurred in every measure which was required for their establishment. In short, as soon as he could enter upon it, Dr. Clarke had the happiness to find, that the field was open to him

without either opposition or ill-will, and the fiat of the Vice-chancellor followed almost as a matter of course. Having therefore finished his preparations, which were both expensive and laborious, and which had been suspended during some months previous to his marriage; and having published a new synopsis of the mineral kingdom, and an extensive syllabus, he at last announced a day for the opening of his Lectures, the 17th of March, 1807. What his sensations were at the approach of the moment, which was to be the crisis of his fate, will be best known from the extract of his letters to Mr. Cripps.

"Feb. 12, 1807.

"I send you the Cambridge paper; you will see the two advertisements. On Tuesday, 17th, at a quarter after twelve, imagine me in a grand room, before all the University, tutors and all!—all my minerals around me, and models of crystals."

"Feb. 18, 1807.

"I have only time to say, I never came off with such flying colours in my life. I quitted my papers and spoke extempore. There was not room for them all to sit. Above two hundred persons were in the room. I worked myself into a passion with the subject, and so all my terror vanished. I wish you could have seen the table covered with beautiful models for the Lecture.

"Fancy me in the midst of my pupils, as Haüy used to be, coming from Lectures. I have now my Lecture board covered with names on all sides."

"The success which the first Lectures obtained, and the interest which they continued to inspire, are too fresh in the memory of his friends to require any observation or testimony from his biographer: suffice it to say, that in the course of the following year, his reputation as a mineralogist, in the University, was so far established, as to encourage his friends in the hope of obtaining for him the establishment of a new professorship in the University in his name. This measure met at first with some opposition, and having been prematurely pressed, had in the first instance failed; but in the latter end of 1808, the second year of his Lectures, the sense of the University having been previously tried, a grace to that effect was brought up to the senate by the Proctor, the Rev. G. D'Oyly (now Dr. D'Oyly, Rector of Lambeth, &c.) and carried almost unanimously. Writing to a friend, he says,

"Dec. 1, 1808.

"D'Oyly has proved himself a noble support; you cannot conceive how much interest he takes on my account. He has been all over the University, and he says, they are unanimous to a man, in their desire to see me upheld in this place. Next Thursday week, he goes up with the grace to the senate, to found a professorship in my name. After what happened last time, I will promise nothing; but there is every appearance of the most triumphant and popular success."

"Dec. 15, 1808.

"I have only time to say, it has been carried triumphantly, and I am Professor of Mineralogy.

"When the voting began in the senate, there was not a single negative in the black hood house, and in the white hood house the votes were thirty-eight to seven."

Thus were his most sanguine wishes crowned with success, and thus were his spirit and perseverance rewarded with one of the rarest and highest honours which the University could bestow. How well he merited the distinction, will appear hereafter.

In this year he preached two sermons, at St. Mary's, with great reputation and success; the first upon the prejudices of the Jews, the second upon the prejudices of the Gentiles, in the reception of the Gospel.

The next important concern in which he engaged, was the disposal of the manuscripts he had collected in his travels. It appears from his letters, that the acquisition of these treasures had always been regarded by him with extraordinary pleasure, although it was difficult to form any probable estimate of their worth before their arrival in England; but having freely submitted them shortly after his return to the inspection of the most eminent scholars connected with the University, he had soon still stronger reason to congratulate himself upon his success. Among them the *Patmos Plato* was soon distinguished by the sagacity of Professor Porson. Others of the manuscripts passed through his hands, and received occasionally the benefit of his remarks, but to this he attached himself in a particular manner, attracted not more by the characters of beauty, clearness, and almost unrivalled antiquity, which constituted its saleable value, than by the ample field afforded by the notes and quotations in the margin for the exercise of his acuteness in conjectural criticism, in which he was so incomparably eminent. From the moment this treasure was confided to his care, it scarcely ever was suffered to be

out of his hands ; wherever he went, he carried it about with him, and it remained in his possession till he died. It was also a strong bond of union between Dr. Clarke and himself, and the first occasion of that intimacy, which was afterward continued with so much pleasure to both ; and as every thing which relates to this extraordinary man, is interesting, the reader will not be displeased to find here, two letters connected with this subject, though anterior to the present period of the history ; the first from Dr. Clarke to the Rev. George Browne, of Trinity College, describing the impressions left upon his mind by his first interview with this great scholar ; the second from the Professor himself, containing his earliest report of the manuscript.

“JESUS COLLEGE, Cambridge, Jan. 8, 1802.

“And truly, as touching Porson, all the accounts I have heard of this wonderful man, for so many years, have not raised my expectations high enough, to see him without astonishment.

Τοῦ καὶ ἀπὸ γλωσσῶν μέλιτος γλυκίαν εἶναι αὐτῷ.

“So rare is it to find among men, the highest attainments in ancient literature, joined to a love of the poetry of yesterday, the most refined genius, and almost supernatural intellect. I had seen him in my rooms in the morning, and we bore off together to Trinity, the Plato and Aulus Gellius. In the evening he came, already primed, but did not miss fire. He was great indeed, narrating, reciting ; sometimes full of fun and laughing ; at others weeping bitterly at the sufferings of friends that flourished near two thousand years ago, but with whom he seemed as well acquainted, and as familiar, as if they had smoked a pipe with him the preceding evening. At about three in the morning, a curtain seemed all at once to fall over his mind—ale, wine, and smoke, had extinguished the intellectual flame, and he remained from that moment until he left me, like the beam of some great building on fire, whose flames the engines have put out, black and reeking.

“Porson is all rapture and joy about the Plato ; he says Greek MSS. are old, even down to the year 1400 ; as the Greek language experienced a revival in latter ages. Latin MSS. have no antiquity after the eighth century. The Plato, said he, may be considered as equivalent to the combined authorities of any two known MSS. It is a monument of literature ! There’s for you ! Townley’s Homer he considers as one hundred years later than the Plato. He found the Postscript

perfect, and had no objection to make to the inserted letters. The work '*de Animalium Proprietate*,' is extracted from the works of Ælian and Aristotle."

"Dec. 18, 1802.

"I am much obliged to you for your very important and interesting information, of which I hope to avail myself in a few days. The MSS. must at any rate be extremely curious, and being so old (November A. C. 896) may perhaps be the source from which all our present copies are derived. It is only six years younger than the oldest Greek MS. that Montfaucon had seen, with an express date. (Palæographia, p. 42.) But Dorville (on Chariton, p. 49, 50.) had in his possession a MS. of Euclid, written in the preceding year (Sept. A. C. 889,) written by Stephen Clerk (any ancestor of Mr. Clarke's?), and purchased by Arethas of Patræ for four (read fourteen) nummi. In the second line of the specimen you sent me, the reading is *Ἀγέθας διακόνος πατρῶν*, i. e. the MS. was written by John the calligraph, for the use of the deacon Arethas, a native of Patræ, and cost thirteen Byzantine nummi, about eight guineas of our money; a specimen of the MS. dated A. C. 890, you may see, No. 3, of the plate opposite to p. 270, of the Palæographia. I shall add no more, as you may find Dorville's Chariton and Montfaucon's Palæographia, both in our and the public libraries. Tell Hole, that I have got the third and fourth volumes of Schweighæuser's Athenæus (Lib. iv—vi. of text, iii. iv. of notes,) which I will bring down with me if he wants them. I have, I believe, nothing to add, but that I am with due respects to all friends, dear Sir,

"Your obliged, humble servant,

"RICHARD PORSON."

"No. 5, Essex Court, Temple,
Or rather, No. 15, Charter-House Square."

"Others of the MSS. were placed in the hands of Dr. Butler of Shrewsbury, Dr. Maltby, and Dr. C. Burney; and several copies of the Gospels were examined and collated by the Dean of Ely (Dr. Pearce,) and Mr. Hollingworth.

In this manner the MSS. were distributed till the autumn of 1807, when Dr. Clarke having become better acquainted with

their value, as well from the report of these gentlemen as from his own examination, his next care was to see them placed together in some secure and honourable repository, where they might always be accessible to the learned, and would be estimated as they deserved; and although he was compelled in this arrangement to consider what was due to his family, yet the way in which he set about it, evidently showed the liberal and patriotic views always prevalent in his mind. His first wish naturally rested upon his own University; but he had been early taught to believe that the public authorities there had no fund applicable to such a purpose. He next turned his thoughts to the British Museum, and, as it is said, was actually upon the steps of that building with the view of proposing his collection to one of the Curators, when he was accidentally accosted by a Professor of the sister University, who suggested to him the idea, which he readily seized, of offering it to the Bodleian Library. However this may be, certain it is, that the proposal was made in form to the Bodleian by Doctor Kett in the spring of 1808; and the Curators having immediately expressed their readiness to treat, a correspondence, which yet remains, commenced between Dr. Parsons of Baliol, then vice-chancellor, and Dr. Clarke himself; which notwithstanding some trifling delays, chiefly caused by the want of knowledge of business on the part of the latter, was happily brought to a conclusion in November of the same year, to the satisfaction of all the parties. The first offer included his early editions of printed books, which were afterward at the request of the Curators withdrawn. The price was 1000*l*. Dr. Clarke seems to have signified a wish in the first instance, that the Curators should themselves put a value upon the MSS. after having received a catalogue and inspected them, but this they naturally declined, and proposed a reference to Mr. Parsons, which was probably prevented by the Professor's state of health, for he died in September of this year: and in the end Dr. Clarke undertook the task himself. The particulars of his valuation are among his papers, and the first articles shall be extracted to show the fair, moderate, and unaffected manner in which he conducted it.

"Dr. Clarke, by and with the advice of friends, does most respectfully submit the following answer to the Curators of the Bodleian library.

"1. That the value of the Patmos Plato, may easily be estimated, from the price set upon it by Mr. Paine, bookseller, of London, from the recent sale of Mr. Cripp's copy of the Orators, which, although without date, and evidently not older

than the thirteenth century, sold for three hundred and fifty-five guineas, and also from the expense and difficulty of acquiring it; and that its value be fixed at four hundred and fifty pounds. Vell. folio.

"2. The small volume from Patmos, of the works of Gregory Nazianzenus, being, according to Professor Porson, in a character almost as old as the Plato, and moreover, containing marginal notes of importance, is, notwithstanding, without date. It is difficult therefore to fix any adequate price upon it. If, therefore, forty pounds should be deemed by the Curators of the Bodleian a sum much below its real worth, Dr. Clarke and his friends, as in all other instances, have the utmost reliance upon the future consideration of that respectable body. This manuscript is also upon vellum.

"3. In a case of red morocco, now sent to Oxford, the Curators of the Bodleian will find a most exquisite copy of the Gospel, written on vellum. It belonged originally to Prince Alexander Bano Handjerli, of Constantinople. Some entire pages are written in gold. The manuscript is moreover perfect. It is bound in wood, covered with brown leather. The following observations were drawn up concerning it, by the Rev. Dr. Pearce, Dean of Ely. 'As it has not the note of interrogation (;) it was written before the ninth century, when that note was first introduced. It is not prior to the seventh century, as it has accents. It has the Iota postscriptum and not subscriptum. The comma, characteristic of the eighth century, very seldom occurs.' This manuscript, from its excessive beauty and antiquity, as well as from the price paid for it, is valued at sixty pounds."

' The number of articles was thirty-two; one or two of lesser value were missing when the collection arrived at Oxford, but Dr. Clarke voluntarily added several others not included in the catalogue, and also some scarce printed books, which was handsomely acknowledged by Dr. Parsons. Among them may be mentioned, the first edition of the Poems of Chartier, and a MS. of the Code of the Calmuc Laws. A learned catalogue of all the manuscripts purchased of Dr. Clarke was soon afterward drawn up by Professor Gaisford, and printed at the University press.

His Greek coins, the fruits of the same travels, he disposed of in the course of the next year, 1810; on which occasion the same liberality was displayed by him in his treaty for them, and the same anxiety for their ulterior use and destination. "I feel the necessity," he says, in one of his letters, "of parting with my medals, but I shall be satisfied to get 100l.

for them, if I can place them in the hands of Lord Aberdeen, or Mr. Payne Knight." Whether they were previously offered to Lord Aberdeen, is not known to the author of this Memoir, but the proposal was promptly and gladly accepted by Mr. Knight; and a hundred guineas was immediately despatched by him to Dr. Clarke, instead of the hundred pounds which was asked; nor should it be forgotten, that after they had been carefully removed, a task which Mr. Knight performed in person, and had been examined more at leisure, he requested Dr. Clarke's acceptance of a piece of plate. This was a handsome cream-jug, exactly fashioned after the model of an antique vase in Mr. Knight's possession, with a classical inscription by himself; and for the sake of Dr. Clarke's memory, he will, it is hoped, pardon the following extracts from his letters upon this subject, as testifying from so competent a witness, not less to the taste and industry displayed in the collecting, than to the liberality shown in the disposing, of these coins.

"I really feel stubborn scruples of conscience at having accepted your coins at a price, which I find upon mature examination to be below their real value, and though I know your liberality will not hear of any farther pecuniary consideration (nothing could be more certain,) perhaps you will do me the favour to accept of some trifling article of plate, as a mark of my esteem and gratitude. In a subsequent letter: "Allow me again to thank you for the very valuable addition made to my collection, and for the liberal and handsome manner in which it has been done: the more I examine the more I am satisfied and delighted, and more sensible of the extent of the obligation you have laid me under."

It is fair to add from the same source, that whatever light the bronzes or coins in Mr. Knight's collection, or his own extensive and accurate knowledge could throw upon the subjects of Dr. Clarke's inquiries, was always most readily supplied, with a handsome acknowledgment, of the obligation by which all the friends of arts and letters were bound to furnish him with every information in their power, for the sake of the use he made of it.

Before this last transaction was completed, a change had taken place in his residence. It will be remembered, that the first place in which he settled was a small house in St. Andrew's-Street; but in 1806, when his family had begun to increase, and his prospects in life to expand, he removed to a family house belonging to the Ansties at Trumpington, a plea-

sant village about two miles from Cambridge; where the author of this Memoir, who had been his neighbour in the town, had been residing some months before. It was a dry, airy, and capacious mansion, in good repair; admirably calculated for a rising family, and not less favourable to the health of Dr. Clarke, than it was agreeable to his taste; inducing by its walks and grounds much voluntary exercise, which was what he required. and administering largely to the pleasure he took in rural occupations and amusements, of which no one had a keener relish than himself. "If you could see this place now," he says in a letter to Mr. Cripps, "it is a perfect paradise; the air is perfumed by innumerable flowers, the groves full of thrushes and nightingales, the trees literally crowded with fruit; we began to cut the hay this morning, and Angelica with Edward are already in the field, tumbling in the midst of it. The eternal sunshine of Cambridgeshire is, in my opinion, a peculiar characteristic of this part of England." There was only one evil attending this residence, and that was, the expense; for though Dr. Clarke had calculated upon a considerable saving from the diminution of his company at such a distance, his own liberal hospitality, with the pleasure his friends derived from his society, and the attractions of the place, precluded the possibility of such a result.

We now approach the period of the publication of his Travels. So early as the year 1805, and shortly after the appearance of the tomb of Alexander, an agreement had been concluded and signed, through the intervention of Dr. Henley (Principal of Hertford College,) in virtue of which he assigned to Messrs. Cadell and Davies of the Strand, the copyright of his Travels, upon the liberal condition of receiving ten guineas a sheet, free of all deductions, to whatever extent the work might be carried; to which was to be added a large number (35) of presentation copies gratis. In consequence of this arrangement, the drawings for the first volume were immediately placed in the hands of the engravers; and every other preparation was made by the Booksellers for the speedy publication of the Work. At first, however, the progress of it was very slow; other matters of more immediate and more pressing interest, particularly his marriage, and the preparation for his Lectures, occupied almost exclusively his time; nor was it till a considerable period after his marriage, early in 1808, that he found leisure to apply himself seriously and earnestly to the task; from this time, however, the Work made a rapid progress, and at last, at the commencement of the year 1810, the first volume appeared in 4to., and the rest followed at nearly equal intervals of two years.

It is beside the purpose of this Narrative, to enter into the merits of a Work which has already been so much canvassed by critics of every description ; suffice it to say, that notwithstanding the lofty nature of the expectations formed of it, its success, particularly at the outset, far exceeded everything which had been predicted of it ; that the early volumes in particular went through several editions in this country, and were translated into some modern languages ; and that if the sale of the latter has not been quite so extensive as that of the former, it must be attributed not to any difference in the execution of the Work, but to the greater or less degree of interest which the different countries described, with their different productions and relations, were calculated severally to inspire. Of the truth of this observation when applied to the first volume, relating to Russia, it is impossible to entertain a doubt ; from the singular situation of that country, in the latter years of the Emperor Paul, with regard both to her internal and external policy, and the general exclusion of strangers from his dominions, every authentic account of that period was likely to be received with avidity, while on the other hand the probable influence of her power and counsels upon the fate of Europe, at the time of the publication, rendered the character of her institutions and people, objects of the most lively and general interest. Thus was the public mind prepared for the Work, and thus did the strong tone of feeling under which Dr. Clarke wrote, accord with the general excitement under which it was read ; and when we consider farther, how strongly political prejudice is apt to warp the judgment of mankind, the same facts which will account for the rapid sale of the volume, will also explain the reason of the extravagant praise or blame which has attached to it. Looking back now with an impartial eye upon the Work, and the nation it describes ; considering the extraordinary susceptibility of the Author's mind, and the expression he lets fall in one of his letters, that he should be glad to like the Russian people if the government would let him, we may admit it to be probable, without impeaching the veracity of a single statement, that the vexations he underwent, induced him unawares to linger more on the dark side of the picture than upon the bright one, and that he might possibly have sat down to the composition of his Work, under much of the same kind of feeling with which many others sat down to the reading of it. It should be remembered too, for the sake of all parties, that Dr. Clarke saw the Russian people at a moment when their natural good temper and vivacity were soured by the disgraceful situation of their country.

The first volume appeared early in 1810, the second in 1812, the third in 1814, the fourth in 1816; the fifth in 1819; of the sixth only twelve chapters were finished at his death, the rest were added by his friend the Rev. Robert Walpole, to whom the public is indebted for many interesting and valuable notes in his former volumes. Of the first, three quarto editions were published, of the latter volume only two; but it appears from his letters, that 1500 copies were printed of the first edition of the 2d volume, and 1600 of that of the 3d, and, in both cases, sold off in a short period. There has also been an octavo edition of the first four volumes. Thus it appears, that this great Work occupied a period of nearly twelve years, and the delay has sometimes been imputed to him as a fault; but the accusation is most unreasonable: in the execution of such a task nothing could have been less becoming towards the public, or more revolting to himself than haste; and yet to do all he could he was not always able to avoid it. Such was the demand upon his time, from his imperative professional engagements which sometimes engrossed him altogether for a considerable period, that he was rarely advanced above a few sheets beyond the printer; and at times, nothing less than long days and nights of labour, as injurious to his health as they were oppressive to his spirits, enabled him to fulfil the expectations of his Publisher; nor must it be imagined that he wrote for this work with the same ease and rapidity with which he proceeded in other things; the wide scope and learned character of his subjects, demanded constant and laborious research, and the modelling of his sentences, frequently cost him considerable pains. "If I had not been blessed," he says in one of his letters, "with double the share of spirits, which commonly belongs to sedentary men, I should certainly sink under the task, but I wish you who may survive me, to tell my little Edward and Paget hereafter, when they hear people say *I wrote with ease*, how much they were mistaken."

Add to this, that he was nice; not to say supercilious, in the revision of the engravings and other embellishments of the Work, all of which by a special article of the contract passed through his hands, and were submitted to his approval; and it is difficult to conjecture how much time and trouble were expended in alterations of this kind, which originated in himself. Under these circumstances, instead of being surprised that a work consisting of six quarto volumes, and containing nearly 5000 pages of letter-press, should have occupied so long a period, we can only wonder that he was able to do so much within the time: especially as it may be affirmed with truth, that he left more memorials of his labours during the period of

this publication, in each of several other departments of learning, than almost any other person whose attention had been confined to one of them. This is a sweeping observation, but it is not made unadvisedly. In Mineralogy, in Chemistry, and the Fine Arts, &c. his productions are well known; but it is not known, although infinitely more creditable, that in the course of fifteen years, he composed a great number of Sermons, now extant; of which, at least ten were preached on public occasions, or in St. Mary's.

It has been stated, that ten guineas a sheet were to be paid for the Work, but after the second volume, a slight alteration in Dr. Clarke's favour was made, in consideration of his resigning his claim to the greater part of the presentation copies; in consequence of which, the sum of 1200*l.* was paid for each of the three succeeding volumes.* One hundred pounds was also allowed to him for the additions to the 2d edition of the second volume; and upon the whole it appears that 5845*l.* were received by him for the first five volumes; the last was paid for at the original rate, and amounted to 750*l.* The speculation must have been exceedingly lucrative to the Booksellers, but in the first instance the risk was also considerable, and it is only an act of justice to the late firm of Cadell and Davies to say, that their conduct throughout was both liberal and conciliatory to Dr. Clarke.

Before the appearance of the first volume of his Travels, and in the midst of the bustle of his public Lectures, there came another work from his pen, entitled "Marbles, &c., brought from the shores of the Euxine, Archipelago, and Mediterranean, and deposited in the Vestibule of the Public Library, by Edward

* It is curious to contrast, at this distance of time, the manner in which this work was actually composed, with the course recommended to the author, in the following extract of a letter, from one of the most intelligent of his correspondents:—

"Will you now permit me, as a friend, to hazard a hint to you for your future work. Let your various journeys be your own sole observations—what you saw—what you heard—what you marked down on the spot. Let there not be the least appearance of compilation, and no reference at all to any preceding writer or traveller, except from a necessity which cannot be avoided, and that, I think, will seldom occur. There should be what Sir Wm. Temple calls 'a raciness' in your travels. They must be what wine should be—they should taste of the native flavour of the soil. They must not be filled or contaminated with extracts or opinions of others; if you do, the whole will be vapid. You may now avoid this, and so may write them in the epistolary, or any other form. What you publish must be exclusively your own, or it is nothing. You must not be like —"

Considering the character and talents of Dr. Clarke, there are few I think of his friends who would not have concurred at that time in the propriety and good sense of this advice, and yet one cannot now be sorry that he did not accept it; for though his letters from abroad are a sufficient evidence that a work constructed by him upon such a plan, would have been much more lively and interesting to ourselves, all would have been disposed to lament, that the great monument of his learned industry which his travels have supplied, should have been wanting to posterity.

Clarke, LL.D." It should seem at first sight, from the title of this book, that it was nothing more than an elaborate edition of his former work, extended to the other marbles in the collection, and chiefly calculated for the strangers who came to visit them. But he had higher views in the composition of it. In presenting originally these treasures to the University, Dr. Clarke was not actuated by a selfish desire of erecting in an honourable place, an isolated monument of his own travels, but by an ardent wish to stimulate others to similar exertions in the same career. In this view he always spoke of the marbles obtained by himself and Mr. Cripps, as the nucleus of a collection which being gradually augmented by additions from various quarters, the voluntary offerings of other enterprising members, might some day confer dignity upon the University where it was placed, and by the illustrations it would afford of classical History and Poetry, might at once assist the studies and inflame the ardour of the youth who would have access to them. In this expectation he was not altogether disappointed. A Greek altar described by Tournefort in his *Travels*, and brought from the Levant by an ancestor of Mr. Harvey of Jesus College, was early presented to the Vestibule by that gentleman, who afterward added another of the time of Eumenes, King of Pergamus; and this was followed by other contributions transmitted by Lord Aberdeen and Mr. Walpole, the fruits of their own travels; but to show more pointedly the degree of enthusiasm he had inspired, it may be stated, that several expeditions were planned and undertaken to Greece and the Archipelago (particularly one by Mr. Eustace and Mr. Petre,) principally with a view to this patriotic object. To support and encourage the spirit which he had so happily laboured to inspire, and to communicate the lights and conjectures of learned men, respecting the monuments already collected, were the principal causes of this description of the Marbles being drawn up; and with a corresponding liberality the University published it at their expense. The work was handsomely printed in large octavo, and contains four good engravings; three of the Ceres in the different periods of its existence, by Flaxman; and one a sketch of Eleusis by Sir William Gell. It includes also, Professor Porson's Translation of the Trilingual Inscription on the Rosetta Stone, and a Letter from Lord Aberdeen upon the discovery of the Figure of Medusa's Head, as it is represented on the breast of the Eleusinian Fragment, on a tomb near Athens.

The fifth year of his Lectures had now passed, and it was clear that the effect produced by them in the University had exceeded the expectations of his friends, and amply justified

the sanguine measure of success which he himself had predicted of them. He had quitted his notes and spoke extempore, and instead of growing dull and faint as by repetition, the interest excited by his Lectures both in his own mind, and in those of his auditors, became every year more animated and more attractive, as was evinced by the growing numbers of his Class, and by the increased attention and pleasure with which every new course was heard. But this success was not obtained without great labour and anxiety. Every year he prepared himself for the ensuing course, with as much earnestness as he had done for the first; and once an interruption of six entire months is recorded in the composition of his *Travels*, during which he was wholly occupied by his Lectures, or in subjects arising out of them. In other respects, his own character and attainments gave him a great advantage; by means of his extensive correspondence both in England and on the Continent, and by the eagerness with which all his friends and pupils vied with each other in contributing to his information or his stores, he had always some new discovery wherewith to grace the opening of his Lectures, or some new facts or specimens to cheer the expectations of his hearers in the progress of them: while his bold and eloquent descriptions of the majestic scenes of nature, which the subject sometimes permitted, and his frequent and forcible appeals to the wisdom and benevolence of the Creator, leading them from nature up to nature's God, rendered his Lectures a source of delightful improvement to his pupils, quite independent of the instruction they were specifically intended to convey; inso-much, that his list was not only crowded every year with a new swarm of youthful candidates, but distinguished by the names of many of the initiated in the science, who had attended him from the very first. It is pleasing to read at this time, the numerous testimonies both from young and old, in letters and in other documents, of the approbation with which his Lectures were heard, and especially of the moral improvement which was always acknowledged to have accompanied them. Nor was the reputation of his Lectures confined to the University of Cambridge: already he had been elected member of several Geological Societies, English and Foreign; and in the latter part of this year, 1811, he received an invitation from the Royal Institution, seconded by letters from two of its most distinguished members, Sir H. Davy and Mr. Warburton, to deliver a course of Lectures at their establishment. The proposal was agreeable to him in some respects, but it was strongly opposed by his friends, and for many reasons; the best of which was, that his time had

already more claims upon it, than he could satisfy consistently with his health, and that if he had undertaken the task, it must have been at the expense of some duty, or by the suspension of labours infinitely more important to his family ; he declined it therefore, and the determination was in all respects a wise one. But though he had the prudence to refuse this additional demand upon his time, he was not proof against another subject, which, coming suddenly upon him with an overwhelming influence, absorbed for a while every feeling and every faculty of his soul ; this was the controversy of the Bible Society ; an institution, which had carried on its operations for some time without exciting a great degree of attention in the University till the close of this year 1811, when, in consequence of the decided manner in which two of its most distinguished members, Mr. Vansittart and Dr. Marsh, had entered into the controversy, and the strong but opposite views they had taken of it, it became at once a matter of general and animated discussion. In such a ferment it will readily be believed, Dr. Clarke was not likely to remain quiet, and without entering into the merits of a question which has so long been before the public, it may be affirmed, that it was impossible for any one who was acquainted with his character, to doubt for a moment which party he would espouse ; he was not wont to be appalled by remote or obscure dangers in any course which he was tempted to pursue, but in the present case, when the means were so simple and benevolent, and the object connected with it so extensive and important, he held it almost criminal to hesitate ; and while some with cautious prudence stood aloof awaiting the result, and others more decided, were yet averse from appearing prominent in the contest, Dr. Clarke announced himself openly an advocate for the institution, and was prepared with his natural openness and ardour, to rush forwards on the first occasion into the very hottest of the battle. Nor was an opportunity long wanting : a meeting was called at Cambridge in December 1811, for the establishment of a Branch Bible Society, which was very numerous and respectably attended, and among others by Dr. Clarke. It appears from his letters that he came to this meeting, under a great degree of excitement, the result of long and powerful workings of his mind, by night as well as by day, which having been raised to a high degree of enthusiasm by the sympathies of a crowded assembly, burst out at last in a flood of eloquence which was declared by the friends of the Society, to have been the finest to which the subject had given birth, and allowed by the most indifferent, to have been wonderfully animated and energetic ;

and remarkable for many passages of great power and pathos, both well conceived, and well expressed.

Whatever difference of opinion has existed, or may still exist, among good men, respecting the Bible Society, there are few we think, who would refuse their approbation to the motives and feelings expressed by Dr. Clarke in this letter :—

“TRUMPINGTON, Dec. 17, 1811.

You can have no idea of what has been passing here. I trust I have seen the greatest and brightest day of all my life. The opposition to the Bible Society was so great, that they not only could not get a single Clergyman of known adherence to the Church of England, to support them; but even such men as — and — took the general panic. That great cry, ‘*the Church is in danger,*’ pervaded every heart. At half-past eight o’clock, the night before the meeting, it was asked me if I had courage to second the resolution. My answer was— ‘*try me!*’ But I assure you this was no common trial. I had not a friend in the world to guide me. Even M——, the only one I saw, warmly opposed my doing it; — thundered; — threatened.—An immense fermentation was every where visible. Add to this I had never read a syllable of the controversy, and in this state of mind, I walked home through darkness and pelting rain, to consider what I should say the next morning to justify the prominent situation in which I was to be placed. One thing aided me, that *my heart* was in the cause, and that the cause was a good one.

“This memorable morning came—never shall I forget it—nor, I trust, will our adversaries. I called upon M—— in my way. ‘Latimer, and Ridley, and Chillingworth,’ said I to him, as I opened the door, ‘have been with me in my sleep, and I fear none of you.’ He still persuaded me against the measure. All I asked was, that as I had in vain urged his attendance in the Town Hall, when I was not to appear there in any active manner, that now, as I intended to come forward publicly, he would absent himself. However, he then, for the first time, determined to be present. All the avenues to the Town Hall were then crowded—no sooner did the doors open, than it was quite full. A deputation of four of us went to the Rose, for Lord Hardwicke, and we regained our seats with him, upon the rostrum, about 12 o’clock.

“Could I now but describe the grandeur and solemnity of this meeting. The most surprising and overwhelming sight to me was that the faces of all that vast assembly, even of the young gowmsmen, were seen streaming with tears of rapture.

Of course, this was not neglected by one of our speakers, whom you may guess, and who, with almost inspired energy, called it, *'a contribution, every drop whereof was treasured in the phials of Heaven'*

"Well! Lord Francis Osborne moved the resolutions, and I rose (God help me! thinks I) to second them. It is impossible to describe the animating shouts, with which I was encouraged—every sentence was cheered. M—— said the effect was such, he expected they should have all their windows broken. Letters with gratulations have poured in upon me from every quarter."

Shortly after this, he entered more decidedly into the controversy, by a Pamphlet in answer to one from Dr. Marsh, upon the danger of disseminating the Bible alone; but here it will be confessed he did not appear with so much advantage as he had done before; the calm, watchful, and reasoning mind, required for controversy, was not his, and of this Pamphlet in particular it may be said, it was written with more haste than the gravity of the subject, or the acuteness of his opponent demanded; having occupied only forty-eight hours, printing included. It was, however, characterized by his usual spirit, and had a rapid sale, but with it his literary share in the controversy ceased. So long, however, as the struggle respecting this Society was actively continued, his voice and influence were in various ways exerted in its support; he entered into an active correspondence with some of its most eminent members, and assisted in the formation of several branch societies in the neighbourhood, particularly at Bury, Chelmsford, and Huntingdon; and wherever he came in the course of these exertions, he contributed by his spirit and eloquence to increase the popularity of the cause; and to add brightness to those rays of splendour which were spread around its rise. It is right to add, however, that he was always a zealous supporter of the Church, and afterwards an active member of the Society for promoting Christian Knowledge.

The year 1812 passed over his head like the two which had preceded it, in great happiness and prosperity; interrupted, however, by occasional fits of illness, from which he soon recovered. His Lectures had increased in profit as well as popularity; his house was the resort of an accomplished and agreeable society, in which he took great delight; the second volume of his Travels had come out with greater éclat than the former, and with fewer assailable points about it; and besides the profits of his new living, a hundred pounds a year

had been added to his income by the government for his Lectures ; but what was to him the most important article in the account, Mrs. Clarke's health, which had declined after the birth of her first child, was now exceedingly improved, and she had brought him a second son. In some respects, however, his residence at Trumpington was by no means calculated to answer the expectations he had formed from it. Instead of that retirement he had expected, and in praise of which he was always so eloquent, his time was much less his own at this village than it had been at Cambridge, as the following extract of a letter to his biographer will abundantly show :—

" TRUMPINGTON, JAN. 13, 1812.

" —Up to the ears—up to the eyes—in all sorts of quill-driving ! Here—don't mind your shoes, walk in, and survey my table—a Preface for —, to his Paper in the Linnæan Transactions—a ditto, for —, his translation of — ; a dish of minced-pie, to be prepared from the materials afforded by — and — as an offering to the public from the — ; sixteen letters—four proof sheets—a funeral sermon—two songs—and a riddle !—Then, by way of repose, to aid all this brewing, and give it leisure to ferment, hark ! fiddles and Moresco dancers in the court for Plough Monday—Edward capering and screaming for joy—Smith's men carrying off my writing desk, to cure it of the rickets—two constables come for Johnson, to make him pay for faults which he did not commit—people calling—maids squalling—C—bawling ! Yet this is the solitude of Trumpington ! and very ungrateful should I be, to speak but in its praise to you ; for I may say, as the celebrated Abbess of the Paraclete did to Abelard—' Hujus loci tu, post Deum, solus es fundator !'—Yet, I will confess, I might dispense with something of what you lament the absence of—' the human face divine.'

" Have you made up your mind to send William to a public school ? When I look at my little boy, I feel all the apprehensions which you must have felt, as to the consequences of exposing one so innocent to the probable dangers of a public school—the bad examples he may imitate—the vices he may learn—the kicks, and cuffs, and bruises, he may sustain : and yet, when I reflect that we have never known an instance of a popular member of society springing from private education ; and *never, never*, from education at home ; my mind is fixed for sending him to exile—to the great lottery ; in spite of '*two blanks to a prize*.' I think, however, that William is yet very young for a great school—another year, or perhaps two, might do him no harm, in spite of all his mother's fondness. What

sayest thou? I have sent you B——'s sermon to chew upon: it may serve to spur (what is it Hamlet's father's ghost says?) *your almost forgotten purpose.*"

There was also another more serious drawback upon his comfort, already anticipated, viz. the expensiveness of this house at Trumpington, of which he now began to be fully sensible; and having made the discovery, he determined upon the only wise plan which was reserved for him; viz. to quit Trumpington, to diminish his establishment, and to contract his society; and Professor Wollaston being about to leave Cambridge, he purchased from him the lease of his house, and removed his family to it in the spring of 1814. The resolution was not taken, however, without many struggles and considerable pain, and it was during this interval, when harassed with the prospect of pecuniary difficulties, (which, after all, were much less serious than they appeared to be,) and distressed at the thought of quitting a place which had been productive of so much happiness to him, that his early passion for travelling took a temporary possession of his mind. "Since we are compelled to leave Trumpington," he said, "we might as well go to another hemisphere." Under this impression, several schemes presented themselves successively to his imagination. Among them, one favourite object of his speculation was the remaining MSS. at Patmos, and in the convents of Mount Athos. "Could I but bring home the MSS. from Patmos," he says, in one of his letters of this period, "I should think that I had not lived in vain;" and with a view to this, he entered into a treaty, first with government, and afterward with the Marquis of Sligo, for spending two years in the Archipelago, in search of antiquities, &c. But neither of these negotiations, which were strongly opposed by his friends, proceeded far; the minister, as appears from the correspondence, had hopes of obtaining these treasures at less expense to the public; and some other obstacle soon interrupted the second plan; but the report of his intended journey reached Athens,*

* That his activity and spirit, during his residence at Athens, should have left a strong impression upon the minds of the inhabitants who were acquainted with him, is not to be wondered at. "The Athenians," says he, in a letter to his biographer, of this date, "keep up their old character; for they swore to Lord Byron, who is just returned from Greece, that I delivered an oration of Demosthenes from the Pnyx; and that this was done to try the effect of the voice in that place, which they said was astonishing. The whole of it is an invention. The Eleusinians showed him the place where Ceres was; told him the ship went to the bottom, wherein the goddess was carried off; but that she would one day return. Lord B. is about to publish some poetical description of his travels. He told me the whole plan, which went in at one ear, and out by the other."

and was received with so much confidence, according to Mr. Hughes, who happened to be there at the time, that Lusieri, an artist of eminence employed by Lord Elgin, who had a great regard for Dr. Clarke, absolutely put off a journey to Malta, which he was contemplating on purpose to be upon the spot to receive him. A third scheme connected with still more distant regions, was afterward entertained by him, and like the rest shortly left to the ground; and before any other had suggested itself, the good genius of Angelica came to his aid; the restlessness of his mind was no more, and all was again serenity and contentment within him. By her taste, foresight, and management, and without any trouble of his own, he found himself at once so comfortably settled in his new house at Cambridge, surrounded with so many objects that were dear to him, and his household contracted into so small a compass, that he seemed no longer to have any thing to regret, or any thing to fear, and was not only reconciled to the change, but even highly gratified with it. His own picture of this magical effect of Mrs Clarke's care, and of the 'couleur de rose' in which every thing appeared to him on his arrival, is quite delightful. "We have been settled in Cambridge about a week, and whatever you may have thought of our splendid chateau at Trumpington, I can assure you that I never felt truly comfortable before, since I set up business for myself. Angelica, to the amazement of all Cambridge, has conjured up quite a fairy palace for us. You never saw any thing more elegant than she has made our house. In the midst of my public Lectures, without my doing a single thing, she moved and packed all our concerns with her own hands. It was like a dream! One morning she took me to Cambridge, and landed me in the most comfortable study you ever saw, where all my books and papers are now arranged, and in perfect order. She has made all the hangings, curtains, beddings, carpets; and I left her this morning in the highest spirits, in the midst of her children. Such is and has ever been my Angelica, 'whose price is above rubies,' and all that the earth contains, in my estimation, is not comparable to her! Our house is opposite to the open square of Catherine Hall, so that we seem to be in one of the great squares of London, and the fine grove of trees in front of that College keeps all the summer sun off from the front rooms, and from the nursery; Edward and Paget are all day at the windows, delighted with the gay scene of so many moving objects. We have got a nice spare room for you and Charlotte, if ever you should come, which you must do if you mean to see either of us again; for we are positively determined to heave out the best bower anchor, and

remain in port for the rest of our time. We are now screwed into an humble form, and I hope to continue so for life, as it is my intention, please God, never to emigrate from Alma Mater any more, unless to go to Paris, which I fear I shall not be able to afford." Nor was this a temporary feeling, arising chiefly from the agreeable surprise which Mrs. Clarke had prepared for him; at several subsequent periods he wrote to his friends in the same strain.

Here, therefore, he remained, and henceforth thought no more either of removing or of travelling. Nevertheless, his anxiety about the MSS. did not cease, and it is creditable to him to mention, that through his means a considerable sum (five hundred pounds,) was placed by the government at the disposal of a gentleman from Cephalaria, for the purpose of effecting this great literary object.

CHAPTER IX.

The Friends and Correspondents of Dr. Clarke—Mr. Burckhardt and his Letters—Mr. Eustace.

THE narrative will now turn aside for a while from Dr. Clarke, to advert to other persons connected with him. Of his friends and correspondents it may be said without the slightest exaggeration, that they formed no inconsiderable portion of the persons whose learning and genius have shed a lustre upon their country during the last twenty years, and this, not in one department only, but in several; and if he had shown as much regard for his own letters, by taking copies of them, as he did for those of others, by preserving them, they would have constituted together a body of correspondence as interesting and instructive as any which has been presented to the public in our memory. His curious and ardent mind, was ever stirring some question of ancient or modern learning, for which the course of study connected with his *Travels* or his *Lectures*, was constantly supplying fresh materials, as various as they were important, and it is only necessary to subjoin the names of some of the persons who took a share in these discussions, to satisfy the reader how much both of light and interest the application of such minds must have brought to

them.* Of these it is not intended to assert that every one was a regular correspondent of Dr. Clarke, although many of them were so in the most extensive sense of the term, but merely to affirm, that they all contributed in their several ways, and in a greater or less degree, to that mass of active information, which he was constantly employed in distributing, through various channels, to the minds of others; for with him the delight of acquiring knowledge was only equalled by that of communicating it. Nor could there possibly exist a stronger testimony to his own candour, liberality, and intelligence, than that such a host of men, so variously gifted and endowed, some of them neither easy of access, nor prodigal of information, should have found it a pleasure for so many years to co-operate in his labours, and to interest themselves in his success: we say, found it a pleasure, for it is gratifying to observe, that the great bulk of these letters are as expressive of good-will and kindness, as they are distinguished by intelligence and learning; and the fact itself will be considered as one of the most remarkable features in the life and character of the man. The letters on Mineralogy consist of two large volumes, collected and bound up by himself, and would almost form a history of the science for the last ten years: those of Mr. Matthias, from Italy, are very numerous, and as remarkable for their classical taste, as for their playfulness and affection. Upon these stores it is not the intention of the author of this Memoir to intrude: happily most of the writers, still survive, and if it were otherwise, even the most moderate use of their correspondence would lead him far beyond the limits and the object of the present work; nevertheless one exception will be made, in the case of Mr. Burckhardt, an accomplished traveller like himself, whose letters will now be given, partly because they throw light upon his connexion with Dr. Clarke, which was highly honourable to both, and partly because,

* Besides the eminent names of Porson, Parr, and Burney, with Dr. Maltby and Dr. Butler, already mentioned, there appear in the departments of classical and philological literature, Mr. Payne Knight, Dr. Raine, Dr. Bloomfield, Professors Monk and Dobree, Dr. Kaye (Bishop of Bristol,) Mr. Matthias, Mr. Weston, Arochdeacon Wrangham, &c.; among persons distinguished by travel, or in the fine arts, Mr. John Hawkins, Mr. Malthus, Lord Byron, Mr. Walpole, Lord Aberdeen, Mr. Squire, Lord Valentia, Mr. Wilkins, Mr. Hobhouse, Mr. Banks, Mr. Burckhardt, Dr. Heber, Sir W. Gell, Mr. Hamilton, Major Rennel, Mr. Pennant, &c.; in chemistry, mineralogy, and natural history, Dr. Wollaston, whose letters are particularly kind and instructive, Mr. Tennant, Sir H. Davy, Mr. Wavel, Dr. Thomson, the mineralogical Professor at Aberdeen, Mr. Hailstone, Dr. Milner, Dean of Carlisle, Professor Kidd of Oxford, Mr. Holmes, Mr. Lunn, Mr. Lealie, Dr. Brewster, Mr. Jameson, Sir W. Smith, Mr. Lambert, &c.; to these may be added, Mr. Edgeworth, Mr. Wilberforce, Dr. Nicholls, Arabic Professor at Oxford; among foreigners, Chevalier, Falas, Haüy, Neesen, &c.—This list does not include the names of many of his eminent friends resident at Cambridge with whom his communications were chiefly oral.

ugh possessing much interest, as well from the character of the man as from the circumstances under which they were obtained, they are not likely in any other way to see the light. It has been affirmed in the Memoir prefixed to Mr. Burckhardt's *Travels*, that the bequest of his Arabic MSS. (the best collection in Europe) to the Public Library at Cambridge, was intended as a mark of gratitude for the literary assistance and the kind attention which he received there; the sentiment is undoubtedly true, but it remains to be recorded how much of the merit of these services is due to Dr. Clarke, how happily in this instance, as well as in others, his talents and character have tended indirectly to the credit of the University, whose welfare he had so much at heart.

Mr. Burckhardt was a gentleman by birth, as well as by education, and resided for a considerable time in Cambridge, before and after his engagement with the African Society, 1788; chiefly with the view of profiting by such opportunities as the place afforded for improving himself in natural history and oriental literature. He brought few recommendations and from principle as well as inclination, lived exceedingly simple and retired: nor was there any thing at that time, either in his conversation or manner, which was likely to strike an ordinary observer; for the dispersion of his family by the French Revolution, had added seriousness to a character naturally grave; and at all times his parts were more solid than showy. Dr. Clarke, however, soon found him out, and by the means which his own resources and his situation in Cambridge supplied, endeavoured to give effect to his views, and to make his residence agreeable to him, as well as instructive. His house was open to him at all times—he procured him access to whatever books or persons were likely to be of service to him; and without wishing to detract from the kindness of Dr. Clarke, and particularly from that of Dr. and Mrs. Marsh, to Mr. Burckhardt himself always attached the highest value, it may be said, that most of his happiest hours were spent in Dr. Clarke's society, and in that of his family. Nor was his sagacity less remarkable with regard to this gentleman, than his kindness. He soon discovered in Mr. Burckhardt the qualities for which he has been since so distinguished, and was delighted to bring them forward to the notice of his friends; to whom he also frequently predicted that high degree of reputation which this traveller afterward attained. It is sensible Mr. Burckhardt was of this kindness, may be inferred from the fact of his having confided his MSS. to Dr. Clarke; but the letters now submitted to the reader show it more decidedly.

Mr. Burchardt to the Rev. Dr. Clarke.

"ALEPPO, May 3, 1811."

"I might begin with a world of reproaches, but knowing as I do that nothing will ever change your fickle disposition, I waive my right of abusing you, and assure you, that notwithstanding your obstinate silence, my thoughts have often been with you, and dwelt on the remembrance of our friendship, which, against all appearances, I still am persuaded to be as sincere on your side as it is on mine. Do not, however, put my confidence upon too severe a trial, nor presume that you possess any means of making in future times amends for having thus trifled with the desire I have to hear of the welfare of my friends. Lady R. will have informed you of my tour to Palmyra. I have since not been idle. As soon as the government of Damascus, after the recent change of the Pacha, and a short internal war, had reassumed some degree of stability, without which the traveller is at the mercy of every miserable village Scheik, I set out upon an excursion to Baalbec and the Libanus, along the highest summits of which, from the Cedres two days' journey southward, I returned into the fertile valley of Bekaa, or Coele-Syria. From thence I continued my way through the Druse districts of Hasbeya into the plain of the Houle, or the lake Samachonitis, where I visited the source of the river Jordan, and the ruins of the ancient Cæsarea Philippi, now called Banias; and returned afterward to Damascus, over the chain of mountains called Djebel Heish. The district of Hasbeya is interesting on account of its mineral productions. Little qualified as I was, fully to judge of them, I was merely busy in picking up specimens of rocks and minerals, in order to exhibit them to some true connoisseur. In the neighbourhood of Hasbeya are large wells of bitumen Judaicum. I likewise found there a mountain covered with pieces of fluor spar, and at another spot native amalgam of mercury. The whole chain of the Libanus and Anti-Libanus is of a primitive, calcareous rock; near the highest top of it, over the Cedres, I found a petrified shell. After my return to Damascus, I remained there three weeks, preparing and collecting information for a tour through a country, which, till a few years ago, had never been visited by any European traveller. I mean the country to the south and south-east of Damascus, which is still called by its ancient patriarchal name, the country of Hauran. Mr. Seetzen, the German traveller, who is at this moment exploring the interior of Africa, to the south of Abyssinia, had seen five years ago part of Hauran,

previous to his memorable tour round the eastern borders of the Dead Sea. The diversity of Arab tribes who frequent that country, make it of difficult access. I had, however, the good fortune to return unmolested, in the beginning of December, 1810, to my head-quarters at Damascus, after an absence of nearly four weeks. The Hauran is cultivated to the distance of about one hundred miles south of Damascus. Its inhabitants, in their dress and manners, and their frequent change of abode from one village to the other, are complete Bedoweens. The generality of them are Turks, but Greek Christians are likewise met with in almost every village, and the Druses have a settlement of about twenty villages in the mountains of Hauran. The good disposition one of the Druses' chiefs entertained towards me, enabled me to push forward into the desert, part of which, to the south-east of the Castle of Bosra, I traversed during a fatiguing march of four days, accompanied by three Druses and two Bedoweens. The mountain of the Druses, as well as the southern plain, is full of interesting ruins and remains of antiquity. I saw an amphitheatre in most complete preservation, several elegant temples, a number of colonnades; and copied upwards of one hundred Greek inscriptions. Most of them are of the lower empire; there are, however, several of the time of Nero, Trajanus, M. Aurelius. On my way back to Damascus, I visited several villages which had a few months ago fallen a prey to the ravages of the Wahabee chief. You may have already been informed by the newspapers that Ibu Saoud, the present Wahabee chief, made in July, 1810, an incursion into the neighbourhood of Damascus; it was just about the time I arrived there from Palmyra. The inhabitants of Damascus, knowing the Pacha's feeble resources for the defence of the city, were so much frightened, that many began to send off to the mountain of the Druses their most valuable effects. The Wahabee, however, executed his design in the true Arab style. He remained only two days and a half in the Hauran, overran in that time a space of at least one hundred and forty miles, plundered and ransacked about thirty villages, and returned flying into the heart of his desert dominions. The Pacha had issued from Damascus with a corps of about six thousand men, but did not venture to hazard the chance of an engagement. Ibu Saoud was for several hours in view of him, but he contented himself with awkwardly firing off his guns. The Wahabees were for the greater part mounted upon she-camels, whose milk afforded in the desert subsistence for themselves, and to the few horses which accompanied them. Their strength was between seven and eight thousand men. It is to be presumed,

that their success will tempt them to repeat their attack ; the eastern districts of Syria will then rapidly be deserted by their inhabitants, and the desert, which is already daily gaining ground upon the cultivated fields, will soon swallow up the remaining parts of one of the most fruitful countries of the east. From Damascus I returned to Aleppo by Homs and Hamah, and completed my journey on the 1st of January, 1811.

"My health continues, thank God, to be as well, and even better than it ever was in Europe. My journey to Palmyra happened to be during the greatest summer heat ; untoward circumstances obliged me to travel for forty hours, almost without interruption, upon a camel that was guided by an Arab, who comfortably sat upon the saddle, while I had nothing but my mantle to soften my desperate seat upon the camel's backbone, behind the saddle ; my blood was boiling, but my health continued as before. During my Hauran tour I suffered severely from almost incessant rains, cold and miserable diet ; but bore it through, and look now forward with much less apprehension to the influence of African climes.

I am tolerably *au courant* in European politics, and rejoice in the noble defence of Portugal and Spain ; Bonaparte begins to show signs of madness, in my opinion : he destroys his own wealth to make his enemies beware not to risk theirs, and the bonfires of English merchandise, all over the Continent, prove only his impotent rage. I have looked out in vain for the advertisement of your Travels ; are they still in petto ? Indeed, I begin to believe from experience, that it is a less fatiguing duty to perform travels than to write them down. I am astonished that no English traveller has yet made his appearance in these parts, since the peace with Turkey ; the moment is as favourable now as it ever can be, and nobody needs be afraid of finding too much trodden ground. Syria still remains only half known, and Anatolia and Caramania are known only as far as the caravan routes conduct the traveller. It has become a conviction with me, that travels in these countries, if pushed on beyond the great caravan roads, admit only of two modes to ensure the traveller's safety. He must either travel with a Pacha's retinue, to enforce his safety by his imposing countenance, and never ceasing presents ; or else must throw himself as a poor devil upon the mercy of his protecting genius, and the good-natured character of the country people. Any half measures cannot fail to expose the traveller to numberless embarrassments ; they will even endanger his personal security, without forwarding in the least his projects.

"I find great pleasure in the study of Arabic, and confess that the oriental amusements of riding, bathing, and smoking,

are likewise much to my taste. Summing up the history of my private life in Syria, I assure you, that I have passed as many pleasant hours in this country as I might have expected to enjoy in any other. The climate is so delightful, and its influence upon one's spirits so beneficial, that I shall certainly ever hereafter regret it."

Mr. Burckhardt to the Rev. Dr. Clarke.

"DAMASCUS, May 30, 1812.

"If you had been conscious of the pleasure a letter of yours would give me, your friendship I dare say would have prompted you long ago to let me hear news of you. It is however not the less welcome for arriving late, for I can assure you that the perusal of your dear and long expected favour of the 27th of November, 1811, has been as gratifying to me as the sweetest draught of water after a summer's day's ride in the desert, which you will allow is saying a good deal. You are rather reserved in your letter about what interests me more than any thing else, I mean your own situation. Were it not for Mrs. Marsh's letter, I should be ignorant of your being comfortably established at Trumpington, and of your having got a living. You were perhaps afraid I might immediately bespeak a room in your new palace; but you need be under no apprehensions of my so soon intruding upon you; my lodgings for several years yet to come, will be Arab huts and Bedouin tents. I wish you heartily joy of the general, I might say unparalleled, interest your Travels have excited, and the proportionate harvest in fame and wealth attending it, and hope that both may still increase by the publication of the second volume. As for your having mentioned my name in your treatise of Syria, I must freely tell you, that it does not at all agree with my wishes. It might seem as if I should like to have my name launched out into the world independent of the support of those to whom my time and labour is devoted. I owe to them alone what I am at present, and should be ungrateful not to give them exclusive credit for what I may become in future. I have avoided much correspondence in England, and cut short all correspondence with Germany, in order that the African Association might not suppose that I was hunting after reputation above that which they might be willing to grant me. If, therefore, you wish to oblige me, and to prove to me that your friendship is due to Burckhardt, and not to the African traveller, you will

henceforward keep my letters in private to yourselves, which I declare to you is the condition *sine qua non* of my future correspondence.

"Since I wrote to you last, which, if I am not mistaken, was from Aleppo, May, 1811, I have till lately been rather inactive. I remained the whole of last year at Aleppo, a journey into the desert excepted, which I undertook in September and October, in order to see the banks of the Euphrates. I visited Rehaba and Deyr (the ancient Thapsacus, of which nothing but a ruined bridge remains), but was prevented from pushing farther on; for the rascals of Deyr killed my camel, and a party of Arahs stripped me, literally to the skin, on my way from Deyr to Sokhue. The view, however, of the majestic river and its luxuriant banks, bordered as they are by the barren desert, is well worth any fatigue, and many discoveries of antiquity may still be made in that part of the desert lying to the north of the caravan route, from Aleppo to Bagdad. But travelling in these districts is subjected to many casualties, and without going to great expense for armed escorts, it is hardly possible to take an exact survey of the country. The time had now arrived for leaving Aleppo, and drawing nearer towards Egypt. I felt real pain in parting from my Aleppo friends. Mr. Barker, the English consul, in whose house I had lived since my return from Damascus, is a most worthy and amiable man, of true English blood (which is scarce enough in the Levant), and possessed of much more talents than are necessary to fulfil the duties of his situation. Of Mr. Van Maseyk, the ex-Dutch consul, the same may be said, and his friendship is invaluable to the traveller, on account of his intimate knowledge of the Turks, their language and manners, in which he certainly beats most Franks established in the Levant. I left Aleppo in the middle of February, in company of Mr. Fiott, of St. John's, who had spent two months at Aleppo, where we had got well acquainted. We kept company as far as Tripoli, from whence he returned by Ladikia and Antioch to Aleppo, in his way through Asia Minor. As for myself, I proceeded southward; I visited the district of Kesröan, the only spot I ever heard of where superabundance of monks is no obstacle to industry; from thence I turned towards the mountains of the Druses, where I remained a couple of days at the Emeer Besheer's new built palace, near Deyr el Kamir, and crossing the southern chain of the Libanus, arrived at Damascus towards the latter end of March. The Druses have lately grown into great consequence, keeping as they do in their hands, the balance between the Pachas of Acre and Damascus. They are, in fact, the only nation in Syria, to which the name of

commonwealth can be applied ; they are free with regard to each other, but despots in their dealings with the other inhabitants of the mountains. If Syria is ever to emerge from its deadly slumber, it probably may be through the influence of the Druses. Headed by a man like Fakhr Eddyn, they might easily extend their dominion over the whole country, throw off their allegiance to the Porte, and regenerate the nation's deplorable state. But at present their government is weak, because they are commanded by the Emeer Besheer, a Turk, or spurious Christian, whom they dislike, and whose salutary operations they are constantly endeavouring to impede. All these speculations, however, are mere dreams. Let a Turk, Druse, or Levantine Christian govern Syria, the state of the people will still remain the same, or rather will grow daily worse, as long as the principles of government do not change. It knows of nothing but extorting money ; the subjects are wont to see a tyrant in every new master ; no recollection of a happier state rouses their souls ; no knowledge of what government ought to be, prevades their minds ; they look on things with stupid, passive indifference, as if the Creator had willed them to serve only for the caprice of their masters ; it is even to be doubted, whether the generality of the inhabitants would felish a government rigidly severe and impartial in the distribution of justice. It requires but a superficial knowledge of the wretched character of the unprincipled Syrians, to be persuaded that, if for instance English laws were to be introduced in this country, half of its population would within the first six months become settlers of Botany Bay.

“ It had been since last year my wish to complete my survey of the Houran ; I therefore visited that country for a second time, and it is now about a fortnight that I am returned to Damascus from that excursion ; I saw those districts which I had not passed over in 1810, and pushed from thence forwards as far as the Wady Zerka (probably the Jabok, the frontier of the Ammonites, in the Decapolis.) The remains of the ancient town of Djerash (Gerasa) in the mountains of Moerad, situated at a short distance from the Jabok, might almost be compared with those of Palmyra and Heliopolis, if the beauty of its architecture was equal to the extent of the ruins. There are, however, two very handsome temples of the best time of Roman architecture ; the construction of most of the other remaining buildings appears to be of later date ; two amphitheatres, several palaces, two bridges over the Wady Keroan, large gateways, and above all a long street lined with columns, leading to a half circle of fifty-seven still remaining Ionic pillars, in front of the great temple's hill, power-

fully claimed my admiration. Upwards of 190 columns in perfect preservation, are dispersed over the city, which appears to have been built after the model of Palmyra. I only found four Greek inscriptions, one of Adrianus, one of M. Aurelius; many others will doubtless in future be found there; but my time was not at my own disposal during my stay at Djerash; the fear of the strolling Arabs had such powerful effect upon the minds of my guides, that they would have left me alone with the gods of G-rasa, if I had tarried a few minutes longer. After a short circuitous tour, I descended into the valley of the Jordan, near where that river issues from the lake of Tiberias. The river Sheryat el Mandhoor (the Jarmouk of the Holy Scripture, and the Hieromax of the Greeks) empties itself into the Jordan a few hours below the lake; in its narrow valley, up the mountains to the east of the Jordan, are ten hot sulphureous wells, close to the river's banks, and on both sides of it; above the most western of these wells, to the south of the Sheryat el Mandhoor, upon an elevated mountain, are the ruins of Omkeis (perhaps Gadara or Gamala,) with two amphitheatres, and immense heaps of fragments of columns; but no columns remain standing. I re-mounted the eastern chain farther northward, and returned to Damascus through the district called Djolan (perhaps Gaulonites,) which together with Hauran is the granary of Damascus.

"I hope to see the remaining part of the Decapolis, in a short time hence, in my way towards Arabia Petræa, and Egypt, for I intend setting out from here in two or three days; I shall then take my final leave of Syria, a country where I have spent many happy hours, and which I might wish to visit once more again.

"In answer to your queries about pointed arches, I must tell you that what I have seen of ancient architecture in Syria, is rather against your opinion; the ruined buildings of the last times of the lower empire, about the mountain of St. Simon Stylites, those of Djebel Richa, of the eastern desert (like Andereen,) and of the Hauran, have all round arches; the ancient remains of Saracen architecture, consist in castles built for the greater part during the epoch of the crusades, which have certainly pointed arches, but their construction is posterior to the introduction of the Gothic style in Great Britain. The castles of Banais, Bosera, Rabbad, Meszyad, Sadjar, Hossn, belong to this period; the latter, which is situated near the road from Hamah to Tripoli, is remarkable for a beautiful Gothic hall, most of these castles owe their origin to the prudent spirit of defence adopted against the Franks by Salah Eddyn; or to the cautious despotism of Melek el

Dhaher, the conqueror of Syria; the exact epoch of whose reign, in the eleventh century, you may find in d'Herbelot. Other castles of more ancient structure like those of Aleppo, Homs, Salkhat, which have pointed arches, have been repeatedly retouched, and it is difficult to decide to what epoch the arches belong; the towns on the coast, of which I have seen very little, ought to be examined in order to answer your question.

"I humbly offer my grateful thanks to Mrs. Angelike (shall I say Kaufman or Clarke?) for having taken the pains of etching my bearded head; the satisfaction I feel is not from the vanity of knowing myself existing in print, although to confess the truth that is flattering enough, but from the conviction I thus derive of your and Mrs. Clarke's often remembering me, which indeed I fully deserve for the friendship I bear to you both. If you believe me you will bring up Hotspots* to be as great a traveller as yourself, for the life of a traveller is certainly a happy one, so long as success and return home may be expected; I hope to arrive in England in time to make an Arabic scholar of him; we shall then send him from Eton to the Wahabee court, to wrangle with the students at Derayah, and leave it at his option afterward, either to become a fellow of Jesus College, or an Olema at Medineh.

"No English travellers have for these last two years been in Syria, excepting Mr. Knight and Mr. Fazakerly in 1811, who visited Jerusalem, the mountain, and Damascus; Mr. Fiott, who has seen the whole of Syria, together with Palmyra; Mr. Wynne, brother to Sir Watkin, who left Damascus a short time before my arrival; and Mr. Boughton who is at present at Aleppo, after having gone over the greater part of Syria. I just hear that the Honourable Mr. North is arrived at Tripoli, and that Lady Chatham has reached Jerusalem; it is not probable that I shall meet either of them. English travellers ought to begin their excursions with Syria, not with Egypt, for many reasons. It were to be wished that instead of going the common caravan roads, every traveller should make it a point of visiting some unknown places. What remains unknown in Syria, even after Seetzen's travels may be published, is the mountain chain of the Auzeyry, on the west side of the Orontes, from Antioch towards Hamah; the chain of the Anti-Libanus; the northern declivity of the Libanus towards Belad Akkar; the country of the Metawelys above Acre; the course of the Jordan; besides many places in Palestine. I have constantly been in expectation of hearing of the arrival of a

* D. Clarke's eldest child.

Palestine traveller, he would still find plenty of business, and room for discoveries.

"I have been very unfortunate in Syria, on account of want of classical books. I did not suppose at my departure from England, that I should be able to travel about in Syria, peace being not yet concluded at that time between England and the Porte; and therefore neglected to take such notes as might facilitate my researches in that country. The only library at Aleppo, is that of Mr. Ronsuan, the French consul; who possesses the Classics without either knowing Latin or Greek; as he has however taken it into his head, to become a scribbler and savant himself, he is so jealous of the means he possesses to advance the literary labours of others, that he never lets his good books stir out of their place. He is a good Persian scholar, and knows Arabic and Turkish, being born at Bagdad, and educated by Persians; but is a most clumsy genius, and ungentleman-like man; mean jealousy of my pursuits made him prevent the best Arabic scholar of Aleppo from giving me lessons. In order to take my revenge, I have done my best to persuade Mr. R. to go on in his bookmaking business, knowing this to be the best means to ridicule himself. The French Consul at Tripoli, Mr. Guys, has a fine library, is a man intimately acquainted with antiquity, and especially with Syrian antiquity; his collection of Syrian medals is extremely interesting, and he is a most liberal and gentleman-like man; it was in his library that I took my notes on the Decapolis."

Mr. Burckhardt to the Rev. Dr. Clarke.

"CAIRO, NOV. 20, 1812.

"My last to you was dated in May, from Damascus, in answer to your kind favour of November, 1811. As I sent it by a good opportunity, via Tripoli to Malta, I hope it will have reached you long ago. I have since executed my project, mentioned to you in my last letter, viz. of entering Egypt by a circuitous route along the eastern borders of the Dead Sea, and the mountains of Arabia Petræa. Had I any interesting news to give you from this quarter, I should forbear to talk exclusively of my own performances; but this not being the case, I shall trouble you to take a map into your hands, and to follow my steps from Damascus to Cairo.

"I left the former city on the 18th of June, a few days before the Honourable Francis North arrived there, who has

since been all over Syria. My first station was Tabaria, on the lake of Genesareth, interesting for a numerous colony of Jewish devotees. Its famous hot baths were at half an hour's distance from it, near the ruins of the ancient Tiberias, which are beyond the precincts of the present town. I visited from thence the borders of the lake, and Mount Tabor. Having unexpectedly met with Mr. M. Bruce of St. John's, to whom the mentioning of your name served me as an introduction, I was persuaded to go with him to Nazareth, where I had the honour of seeing Lady H. Stanhope, who had arrived a few days ago from Jerusalem and Acre. She has since been to the mountains of the Druses and to Damascus, while Mr. Bruce has gone to Aleppo. They were to meet again in October at Palmyra. After a stay of a couple of days at Nazareth, I left that town in company of some Arab pedlars; I returned to the banks of the Jordan, and followed the course of that river for nearly two days, in a fine valley, which begins at the lake of Tiberias, and continues down to the Dead Sea. The ruins of Bysan (Scythopolis,) Succoth, Amata (Amatha,) are in this valley, which is called El Ghor, and is inhabited only by Bedouins. Many rivers descend from the eastern mountains into the Jordan, the principal of which are the Sheryat el Mandhoor (Hieromax or Jarmouk,) the Wady Yabes, and the Zerka (Jabok.) I then ascended the eastern chain of mountains to the south of Zerka, which divides the district of Moerad from that of Belka, as it formerly did the tribe of Gad from Reuben. The only inhabited place in this district is Szalt, an ancient castle, probably Salton, the seat of a bishopric in Palestine III. Its inhabitants live for six months of the year under tents, and pasture their cattle in the neighbouring mountains. About eighteen miles from hence are the ruins of Amman (Philadelphia, Civitas aquarum,) where I saw the remains of a castle of remote antiquity, several temples and palaces, a fine amphitheatre, the largest of the seven buildings of that species which are met with in the mountains to the south of Damascus; but the whole is much inferior to the ruins of Gerasa, which I mentioned to you in my last letter. I then proceeded southwards along the upper plain of the Belka, which is inhabited by Bedouins only. It is limited, seventy miles to the south of Szalt, by the deep, rocky bed of the winter current, called Wady Modjeb (the Arnon of the Scripture,) on the other side of which the district of Kerek, or Moabites, begins. The ruins of Gilead, Jazyr, Esbon, Eleale, Bethmeon, Medaba, Dibon, Aroer, Rabbah Moab, or Arcopolis, and many others illustrate the history of the Israelite and Roman settlements in the territory of Gad and Reuben, or

Arabia Petraea. Kerek is a considerable Bedouin town, about thirty miles east of the southern extremity of the Dead Sea. Its inhabitants, who muster about eighty horsemen and eleven hundred matchlocks, of which one-fourth are Greek Christians, have submitted to pay tribute to the Wahabees. I met there two tax-gatherers, who had just arrived from Medineh, where Ibn Saoud then was. The rascality of the sheikh of this place, who stripped me of the greater part of my money, prevented my visiting the eastern borders of the Dead Sea, and delayed my stay here for twenty days. But the town, whose inhabitants are true Bedouins, being the centre of Bedouin politics in these parts, I found means considerably to increase my knowledge of that interesting nation during my residence at Kerek. It was with difficulty that I got on southwards. The Wady el Ahssa, likewise called Safye, divides the territory of Kerek from that of Djebal (Gebalene,) where I visited the villages of Ayme, Tafyle, Beseyra (Psora,) Dhana (Thoana,) all of them inhabited by Bedouins who have become cultivators. Excellent fruits grow here, and the climate is most agreeable in these mountains (Palestina III^a. was likewise called Salutaris;) but the heat down in the valley, which is a continuation of the above-mentioned Ghor, and is called here Araba, is suffocating. The manna, called by the Arabs of the Ghor Aasal Beyrook, drops in their woods from the tree Gharab: the Arabs eat it upon their victuals like sugar, and make cakes of it. The bird el Katta, the shape of a partridge, but smaller, is met here in immense swarms; the Arab boys kill them by throwing sticks at them; I take it to be the Sekoua, or quail of Beni Israel. The territory of Djebal is limited by Wady Ghoeyr, on the south side of which begin the mountains of Sherah, which continue for three days' journey southward, until they approach the plain of Akabah (Ezi-ongeber, or Ailah,) on the Red Sea's eastern branch. They are the mountains known in sacred geography by the name of Mount Seir, the territory of the Edomites. The castle of Kerek el Shobak (probably Carcarice) is a fine building of the time of the crusades, situated near Wady Ghoeyr. One day to the south of it is Wady Moosa, a narrow valley, on the west end of which the tomb of Haroon (Aaron) is shown, upon a high mountain. The ruins of a considerable city in this wady, surrounded by perpendicular sandstone cliffs, appear to be those of Petra. There are several hundred large and elegant sepulchres cut out in the rock on the wady's sides, with some beautiful and colossal mausoleums, in which the Grecian and Egyptian styles of architecture seem to meet. The ruins of temples and palaces, an aqueduct, an amphitheatre

cut entirely out of the rock, and other antiquities, render this spot of great interest to history as well as the fine arts. Its situation near the above-mentioned great valley, which is the easiest caravan road from Jerusalem to Eziongeber (its colony,) must have made it the emporium of the trade carried on between the Red Sea and Palestine, after Solomon had established his trade to Ophir. I believe myself to be the first European traveller who has visited these districts south of Kerek. Mr. Seetzen went from Kerek straight to Jerusalem. The fear of being ill-treated, and of exposing even my safety, prevented my pushing on as far as Akabah. The Pacha of Egypt keeps there a numerous garrison to watch the proceedings of the Wahabees, and of his rival Pacha of Damascus. I was known by the Bedouins as a native of Damascus; my arrival at Akabah might have, therefore, excited much suspicion, and I had no means to prove, in case of necessity, by any passports or papers that I was a Frank. I exchanged near Shobak my mare against a small herd of goats, for the Bedouins have seldom any cash, with which I wandered from camp to camp, in order to find a guide for Egypt. Having at last procured one, after having been tricked out of half the number of my goats, we were informed that some Bedouins were preparing to set out for Cairo, where they intended to sell their camels. We repaired to their encampment near Maan, a station of the Syrian pilgrim caravan to Mekka, and joined their little caravan. We crossed the mountains of Sherah a second time, passed the Araba, which is a sea of sands, and hurried by forced marches along the desert called el Ty. We left Rakhel (a station of the Egyptian pilgrim caravan to Mekka) at a short distance from us, passed to the north of Suez, and arrived at Cairo after a journey of eleven days (from near Maan,) of great fatigue and no less danger, on the 4th of September.

“Thank God! I continue to enjoy good health, and have not felt a moment of illness during the whole time of my journey, although the heat in this time of the year was often suffocating; and that, though I underwent great privations from want of food and water, and, what is infinitely more painful, from want of cleanliness; for I had been obliged to sell all my linen in order to buy provisions. To have thus repeatedly tried my constitution, and found it answer my purpose, is a powerful incitement to pursue my task, nor shall I ever think of returning to Europe before I shall have completed it.

“There is no chance of my getting off from hence into the Libyan desert for some time. But I hope to employ, in the meanwhile, my time to some advantage. I shall follow the

course of the Nile into Nubia, beyond the cataracts towards Dongola—a voyage upon which I shall start in a few weeks, as soon as the canals are dried up; for I wish to make the journey by land. On my return, I hope to receive some of your favours, for I hardly enjoy any other pleasure in this country, than the hope of living in the memory of my friends, besides the satisfaction I derive from the success of my travels, and the sentiment of performing my duty.

“No English travellers are at present in Egypt. The Pacha's expedition against the Wahabees appears to be very near its ultimate success; his army is before Medina, the greater part of the inhabitants of which are gained over to his side. He is a man of great spirit and energy; if he succeed in Arabia, he may prove a second Napoleon of the East, and will have the advantage of the latter, to have the whole interest of the church in his favour. I have about two hundred Greek inscriptions, which I shall send you some time hence, with my compliments to Messrs. G. Brown and Hollingworth. They are all ineditæ, and many of them are interesting for history and geography. I receive from time to time letters from Renouard. Mr. Gell, I understand, has taken winter quarters at Rhodes: how often did I not envy him his pencil, during my last journey!”

“ESNE IN UPPER EGYPT, October 18, 1815.

“I shall give you up entirely, if, at the receipt of this letter, you do not blush for neglecting so shamefully a person who is so true a friend of yours; but your face I dare say, has already got brazened by your obstinate silence, and if thus, I am afraid it must come at last to a total, mutual withholding of all tokens of remembrance; in the mean while, I shall mention to you, that I wrote to you last from Cairo, I think in November, 1812, giving you an account of my tour through Arabia Petræa. I started again from Cairo, on the 11th of January, accompanied by a trusty Fellah servant of Upper Egypt; the canals were already dried up, our jackasses carried us therefore without any difficulties across the country, of which I shall say nothing, neither of its antiquities, but just express, in passing, my opinion, that the most magnificent ruins of Egypt bear no comparison with the splendour of the remains of Palmyra. Towards the end of March, I arrived in the neighbourhood of the Cataract. I left my servant at Assouan, with all the unnecessary baggage; hired a Nubian Arab, whom I mounted upon one of my dromedaries, and thus entered Nubia, with a degree of curiosity much superior to that which had led me to

undertake my late journey through Arabia. After five days' journey, we reached Derr, the present capital of these parts of Nubia, and the residence of the three brothers, the sons of Soleyman Kashef, who governs the country from Assouan up to Dongola. I had some difficulty to be permitted to proceed farther on ; I was taken for a spy of the Pacha of Egypt, and the governors of Nubia secretly adhere to the interests of the Mamelukes, who have lately conquered Dongola. Ibrim, a miserable, at present ruined, castle, is situated upon a barren rock, sixteen miles above Derr ; eighty miles farther, I arrived at Wady Halfa, where I had a view of the second cataract ; this is just as insignificant as that of Assouan. The country I had passed through till now was very much like the narrow Nile valley, in the neighbourhood of Assouan ; the shore is tolerably well cultivated, the river is lined by woods of date-trees, the produce of which is the principal article of commerce between Nubia and Egypt ; the inhabitants, divided by their language into two different nations, the Kenoos and Noobas, are descendants of ancient Bedouin tribes of Arabia, who followed the Mahomedan conquerors into Egypt, and spread along the borders of the river as far as Dongola ; they are an independent race of men, kind and hospitable to strangers, but in continual skirmishes among themselves, about the blood revenge. The mountains, which till now had always run parallel to the river, close at Wady Halfa, and a wild, rocky district, called by the natives "Batn el Hadjar," or the womb of rocks, begin where the irregular stony bed of the river forms numerous islands and cataracts ; huge masses of granite, porphyry, feldspath, grauwacke, quartz, &c. compose this dreary desert, which it took me four days to cross ; it is a dangerous road on account of the incursions of the Arabs called Sheyga, who often waylay and plunder here the travelling Nubians. On the southern side of Batn el Hadjar, the country opens, and the river flows again in a valley ; I passed here the district of Sukkot, beyond which lies the large and fertile island of Say, with an ancient Saracen castle ; and, forty miles farther, I reached the country of Mahhass, inhabited by blacks, whose caravans depart every year twice for Cairo ; Tinarah is the chief place in Mahhass, about four hundred and fifty miles distant from Assouan, and forty or forty-five miles from the limits of Dongola. Round the mud castle of Tinarah, I found a Nubian army encamped, which had been besieging a rebel chief, and had obliged him to surrender the evening before my arrival ; two of the governors of Nubia had come here to inspect the siege ; when I entered the camp, I witnessed the rejoicings of victory ; large goat skins, full of palm-wine and

palm-spirits, were distributed among the soldiers, and the discharge of loaded muskets, the throwing of lances, and beating of shields, soon announced that the skins had been emptied. I was badly enough received ; the question was agitated among the drunken chiefs, whether my person or my head only should be sent to the Mamelukes, two of whose Beys were, during that very time, travelling along the western shore of Nubia ; I however got off, and hurried back ; there being no boats in this country, I was obliged to swim at Sukkot with my camels across the river, in order to see its western banks, after I had heard that the above-mentioned Mameluke Beys had already passed by, and I returned along the river to Assouan, where I found my honest fellow of a servant in a great bustle, for the people of Assouan had shown a ready disposition to plunder my effects, supposing me to be a deserter of the Egyptian army, and to have joined the Mamelukes. Nubia is very rich in antiquities ; Egyptian temples are met with all the way up the river, as far as Mahhass ; the infancy of architecture shows itself in large subterraneous temples or caves hewn out of the rock, and adorned with Colossal statues of Osiris and Isis, much in the same style as the grottos where the Indians adore their gods ; temples of small dimensions are met with even among the barren rocks of Batn el Hadjar, and the islands of that district are full of brick ruins of small castles, which appeared to me to have belonged formerly to those enemies which were routed and pursued to their holds by the triumphant hero of Egypt, as represented in the battle pieces on the walls of the different temples at Thebes. I have copied some Greek inscriptions which settle the site of the ancient Nubian cities as far as about one hundred and twenty miles above Assouan ; farther upwards, the country appears to have remained unknown to the itinerary of Antoninus at least, but there are numberless ruins of Greek churches, and small convents of the lower empire, all the way up to Sukkot.

If any Cambridge men undertake hereafter the journey into Egypt, advise them to push on as far as at least the second cataract ; between Ibrim and Wady Halfa is a fine temple at Besamel (a Greek name for "bab" i. e. polis,) with four immense colossal figures cut out in the perpendicular side of the mountain ; Besamel ought to be the term of those who visit Nubia by water ; to get on farther, camels are necessary, which are not easily to be got south of Egypt, but are best to be purchased at the market of Esne ; if the government of Mohammed Aly, Pacha of Egypt, acquires stability, the journey into Nubia will become as easy and safe, as that of Upper Egypt is at present ; but as long as the Mamelukes retain

their possessions in Dongola, the country south of Wady Halfa ought not to be visited by gentlemen who travel merely for their pleasure.

"I returned from Assouan to Siout in order to recruit my finances, and revisited then a third time Upper Egypt as far as Esne, the small country town from whence these lines are dated. I hope to start in a short time for the Nubian mountains, in a more eastern direction than I took last spring; I shall reach some harbour on the Red Sea, and return, if possible, to Cairo along the Arabian coast.

"Excepting a few papyrus rolls, I have taken up no articles of antiquarian curiosity in Upper Egypt, but I have purchased several valuable manuscripts at Cairo; every thing of antiques is exceedingly dear; medals may be had cheaper in Covent Garden streets than among the peasants of the Thebaide.

"If you did see me writing this letter, you would willingly apologize for its lazy style; I am sitting in a half open court yard, upon a straw mat, supporting this leaf with my left hand, while my two dromedaries, my jackass, my servant, and a swarm of mosquitos, leave me not a moment's rest. And still I find an hour's time to tell you that I am among the living, while you, lazy creature, comfortably seated in a cool room, behind your bureau, in an arm chair, have become so stingy of your leisure time, as to make it impossible for you to throw away five minutes, in order to let me know how things go on with you."

CAIRO, July 10, 1815.

"The pleasure I felt at my safe return to this city on the 17th of June last, was much increased by the receipt of your dear favour of the 9th of August, 1814, which Colonel Missitt had kept for a considerable time in his hands, having desired him to do so with all letters that might arrive to my address; they were too dear to me to expose them to the chances of a Red Sea navigation. It is with infinite satisfaction I learn that you and your family are well, and that you are surrounded now by such a number of little ones as to furnish one to the public travellers for all four parts of the globe.

"I shall endeavour to answer your architectural questions during a visit to Alexandria, which I have in view, as soon as my health permits it. In the meanwhile I shall tell you that there is a large room in one of the pyramids to the south of

the great ones, commonly called Pyramids of Sakkara, the roof of which consists of one large pointed arch, the two sides of which form an angle of about sixty or sixty-five degrees. I saw no pointed arches in the Hedjar, where I paid particular attention to the ancient buildings at Mekka and Medina. The arches seen there are generally Gothic, a very few Saxon ; but the rains, joined to the friability of the stone, and the bad cement used in the structure of all houses and public edifices, have destroyed all vestiges of ancient architecture, and, I venture to say, that at Jidda, Mekka, Tayf, Medina, or Yambo, the only cities of that country, there is not a single building more than three or four hundred years old.

"I think I wrote to you last in October, 1813, from Upper Egypt. My departure from that country was unfortunately delayed until February, 1814, when I started at last with a small caravan destined for the slave-market of Sennaar. We crossed the great Nubian desert of which Bruce has given such a terrible description, probably, in order to prevent any succeeding traveller from again examining the tract he went over, and reached the Nile again, near the very place from whence Bruce had started for the desert. I followed the river up to Shendy, which has become now the principal slave-market, and mercantile town for the surrounding Negro countries. It was not Bruce's Madame Sittina (Sittina in Arabic means nothing but 'our lady,' a term made use of to the mistress of every house, from the highest to the lowest,) but a rascally black who sat then upon the throne of Shendy, and who stripped me of my gun, sending me in return a dish of meat from his own table. In following the caravan route to Sennaar, and from thence to Gondar, into Abyssinia, routes which are much frequented by traders, I might easily have performed Bruce's African journey, but I wished to explore unknown districts, and therefore turned from Shendy eastward, in order to reach from thence, if possible, Massouah, the Abyssinian seaport, and to examine the northern Abyssinian provinces, where I might have found the descendants of the Troglodytes. Another project likewise called for my attention. It was the same you shortly mention in your letter, viz. that of following the banks of Bahr el Abiadh up to its source in the White Mountains. (Djebel el Kumr as they are called in Arabic, is rather to be translated by 'White Mountains,' than by Mountains of the Moon ; they are probably covered with snow.) This would have been a tour of great importance and interest, but the information I collected at Shendy showed me the great and imminent dangers which would have attended that expedition ; and according to the rule I have constantly acted

upon during my six years' travels, that of not venturing upon journeys where the chances of success were against me, (the instructions I received before leaving England having pointed out to me, middle Africa as the desired object of my mission, for which journey I therefore was obliged to reserve myself;) and taking into consideration this reflection, I abandoned all farther idea of piercing into the interior on this side, and leaving Shendy for the east, reached the fertile banks of the river Atbara (Astaboras, the same word,) which I followed southward for about one hundred and twenty miles, thus approaching Sennaar to five or six days' journey. I saw here ruins of the largest dimensions, and of the remotest age, but unfortunately circumstances produced by imminent peril of attack, prevented my examining them. I then reached the country of Taka, a name which you will find upon the maps of Africa, but ill placed. The country of Taka is inundated every year, about the end of June, by torrents coming from the Abyssinian mountains, and produces an abundant crop of Millet, or Dhourra. Its inhabitants are different populous tribes of Bedouins, among which the Hallinga are the strongest. Their numberless herds of camels and sheep retire for pasture towards the southern mountains, as soon as the harvest is over. The language of all these Bedouins is that of the Bishareen, the Arabs who inhabit the Nubian Mountains, from Assouan up to the Atbara; it is in use as far as the frontiers of Walcait, the northern province of Abyssinia. I remained for several weeks with the Hallingas, and the knowledge I acquired of their character, made me give up all hopes of being able to proceed towards Massouah. The treachery of these people is without bounds, and renders it quite impossible to cross the country with baggage of the smallest value, in order to defray the expenses of the journey. Your very guide, bound by the oath most sacred to him, will strip and kill you, as soon as he finds a safe opportunity. I should therefore have had no objection to divest myself of all my baggage and trifling merchandises judged valuable in this country, if I might have supposed that travelling like a derwish, or beggar (which, taking all together, is the most comfortable way of travelling in dangerous districts,) could have ensured my safety. But the rascally Nubians join to their want of good faith, that of hospitality. Not a drop of milk nor a handful of Dhourra is ever given by the wealthiest shepherd to a hungry stranger. Even those poor Negro pilgrims who come from the shores of the Atlantic, and pass here on their way to the holy city, are obliged to pay for every meal. A person, therefore, thinking of being able to beg his way through these inhospitable tribes,

would certainly in a few days perish of hunger ; a consideration which will certainly be deemed powerful enough to apologize for my not having ventured to proceed in my plan. I was glad to find an opportunity of quitting Taka, in taking a northern direction, and proceeded in company of a caravan, loaded with Dhourra, towards Souakin. We crossed the chain of high mountains, called Langab, to the south of which we had continual rains (in May,) while the hot Siinoom wind was reigning on the northern side, and arrived in the beginning of June at Souakin, a well-known seaport of the Red Sea, whose inhabitants import yearly upward of three thousand slaves from the interior of Africa into the harbours of Arabia. Having with some difficulty escaped the avidity of the Turkish custom officer of Souakin, who was ready to declare me for a Mameluke coming from Dongola, in order to rob me of a faithful slave, the only thing of value left to me, I embarked on board a country boat, and reached Jidda in July, after a very tedious sea voyage, in the course of which we touched at the celebrated Emerald Island, now called Djebel Mekowar, a barren, rocky place, inhabited by a few families of Bedouin Ichthyophagi.

“ My Arabian journey was not so fortunate as the just described African one. The climate of the Hedjaz, and the bad water which is met with there had a very pernicious effect upon my health, which, under the greatest fatigues in Africa, had never abandoned me. I travelled with much more ease and comfort in Arabia, than I had done before ; yet was no sooner arrived at Jidda than I had to cope with a violent inflammatory fever ; at Mekka I suffered severely from the dysentery, and a quotidian fever kept me for three months in my room at Medina, and weakened me so much, that it was with no little difficulty that I was able to reach Cairo. I am now in a convalescent state, but during the hot season strength is not easily repaired, and it may probably take me a couple of months until I am completely restored.

“ During my stay in the Hedjaz, I visited Mekka, Jayf, Medina, and Yembo. The war then carried on in those countries by Mohammed Aly, Pacha of Egypt, against the Wahabees, prevented my visiting from Tayf, the fertile mountains extending towards the Yemen, which are the seats from whence most of the Bedouin tribes of Arabia have sprung, and where the ancient Bedouin manners are still conserved in all their purity. I remained several months in Mekka, a dirty town of almost thirty thousand inhabitants, situated in a complete desert, and performed in November, 1814, in company of about eighty thousand pilgrims, collected here from the farthest west and

east, the pilgrimage to Mount Ararat, six hours from Mekka, which constitutes me now Hadgee, and shall serve me in future as the most powerful and efficacious recommendation, in travelling among other savage Mohammedan nations. In January I proceeded through the interior of the country to Medina, twelve days' journey from Mekka ; it had been my intention to remain there a few weeks, and to return then overland, through the desert to Cairo, examining on my way the extensive ruins said to be at Hedjer, six days' journey north from Medina, the existence of which is attested by several passages of the Koran, and belongs to the remotest times of Arabian history. A few days, however, after my arrival at Medina, I was taken, as I already mentioned, with a fever, which continued its uninterrupted course for three months, and had already made me despair of ever seeing my friends again. As soon as I found myself a little better, far from being able to undertake a fatiguing desert journey, I dragged myself to Yembo, a harbour five days' journey distant from Medina. Nearly three weeks were spent in that town, until I could find a passage for Egypt, and most uncomfortably did I pass that time, for the plague had just begun its ravages there as well as in Jidda, both which towns have almost been depopulated. This disease has never been known to have reached Arabia before ; it was imported this year from Cairo and Suez. (According to the registers of the government, upwards of forty-five thousand souls have died this year at Cairo.) I landed on the peninsula of Mount Sinai, and arrived from thence by land at Cairo, which town I thus reached again after an absence of upwards of two years and a half.

" Arabia, as far south as Abon Arish on the coast of Yemen, has become at present a Turkish conquest. The Wahabees had for several years been very successful against the invaders, which they had routed in almost every encounter. In the beginning of 1814, Mohammed Aly, the Pacha of Egypt, paid a personal visit to his troops in the Hedjaz, and increased his army there to the amount of about six or seven thousand men ; he seized the Shereef Ghalel, governor of Mekka, who was sent by orders of the Porte to Salonie, gained the good-will of the Bedouin Arabs in the Hedjaz by distributing among them considerable presents in money and clothes, and at last ventured in January, 1815, upon an expedition against the united forces of the Wahabees, who had approached Tayf, and formed an army of forty thousand men, all armed with matchlocks ; on the 11th and 12th of January, a decisive battle was fought near the village of Byssel four days' journey south east from Mekka ; the prowess of the Turkish cavalry decided the con-

test, and the Wahabees were completely defeated; they lost upwards of seven thousand men killed, about five hundred prisoners, who were afterward impaled at Mekka and Jidda, all their tents and baggage, and about six thousand camels. The Pacha pursued the fugitives in a southern direction, he took the town Tarabo, headed by a famous female chief, of the name of Ghalye, who had twice defeated the Turkish corps sent against her; and still continuing his way south, possessed himself of the fertile districts of Rayne and Byshe (the latter thirteen days' journey from Mekka), the chiefs of which were all changed by him. From Byshe he turned to the west, and crossing the chain of mountains which runs all through Arabia, parallel with the sea, arrived in the country of the Arabs, called Asyr, whose sheikh, Tamy, was the most powerful chieftain south of Mekka, who had already once defeated the Turkish army, and had joined his party at Byssel with ten thousand men. A hard fought battle of two days put Mohammed Aly in possession of Tamy's castle, the latter himself fled to the Shereef Hamoud, governor of the Yemen seacoast, by whom he was treacherously taken prisoner, and sent in chains to Mohammed Aly, who descended now towards the seacoast at Gonsode, and returned to Mekka seventy-five days after his departure from thence, having thus succeeded in completely subduing the most strenuous adherent of the Wahabees, during an expedition, the success of which does infinite honour to his spirit of enterprise and his martial genius; his troops and himself suffered the greatest hardships from want of provisions, his camels and horses all died on the road, yet such was the influence he had gained over the minds of his soldiers, that they cheerfully followed his orders, which, considering the spirit of independence and constant revolt of the Turkish soldiers, does still more honour to the Pacha's abilities than even his victories. Having thus settled to his satisfaction the affairs of the south, where no Wahabees remain at present, the Pacha proceeded in April, 1815, to Medina, where his eldest son, Touson Pacha, was stationed, in order to direct from thence his operations against the country of Nedjed, and the town of Derayeh, the seat of the Chief of the Wahabees, twelve days' journey distant from Medina; his cavalry took in May possession of the district of Kasyne, and advanced to the distance of six days' journey from Derayeh, being separated from thence by a desert plain. The want of camels of transport, however, did not permit the Pacha to accomplish his designs; orders were sent to Cairo and Damascus for a new supply of several thousands of them, and Mohammed Aly returned in the mean time to Egypt in June 1815. If Derayeh is taken,

the Wahabee power will be entirely destroyed ; but that town is of difficult access, easily to be defended, and inhabited by a warlike tribe of Arabs.

"I have had positive news from Mocha, that Dr. Seetzen was not killed in Africa, as reported some years ago in the public prints, but poisoned in September, 1811, by order of the Imam of Yemen, at Taes, a country town two days' journey from Mocha, while he was just starting on a journey through the inland countries of Yemen to Makat and Bassora ; his papers and baggage, which latter had principally attracted the cupidity of the government, being loaded upon seventeen camels (a circumstance hardly to be believed, but positively affirmed by the gentleman of the East India Factory, who saw Dr. S. only two days before his melancholy fate): in fact his whole equipage was sent to Sana."

"CAIRO, 28th June, 1816.

"For once you have the right to abuse me. It is upwards of four months that I have received your letter of the 20th of October, and I should certainly have answered it long ago, had I not been desirous of taking at the same time my leave of you, and closing for awhile my eastern correspondence with you. My ultimate departure from here must, however, still be delayed ; and this being the case, I did not wish longer to keep back my answer, were it merely to deprive you of the satisfaction to retort upon me for as much negligence as I had formerly reproached you with.

"Your various communications have been most acceptable. They were for the greater part unknown to me, except the political news, for in that we are seldom more than two months behind-hand with France and England. The battle of Waterloo was known at Cairo in the first days of August. What gave me most pleasure to understand is, that you are well and flourishing, and that the success of your publication is equal to your most sanguine hopes, and the just expectations of your friends. I infinitely regret not to have had an opportunity of perusing your work, of which I have seen, however, several reviews. On one subject I am afraid we shall be 'at daggers drawn : ' I mean your opinion of Bruce. It is certainly not by questioning a rude, untaught man about facts which had taken place when he must have been yet a child, that satisfactory inferences can be drawn ; and the circumstance of your Abyssinian at Cairo having recognised the correctness of

Bruce's drawings, is of little moment, at least to me, who know the little power of discrimination Easterns in general possess, in judging of pictures or sculptures. I would lay a wager at any time to take the first Arab from the streets of Cairo, and show him the picture of a flea, asking him at the same time whether it was not like his camel, and to receive an affirmative answer without the smallest hesitation. Bruce, it seems to me, has never had yet justice done to him; for he stands now convicted, and that from his own papers, beyond the slightest doubt, to have been guilty not only of exaggerations, oversights, or braggardism, which might be pardoned in consideration of his other merits, but of the most palpable, downright falsehoods, and shameful literary forgeries, spun out to a considerable length, with which he intended to impose upon an admiring world. Yet he finds his advocate still! Yet many allow that he was an honourable man! His character has nothing to do with his literary merits: the first, I speak it from full conviction, appears to have been, after all his boasting to the contrary, as mean as the others were exalted; and it may at once serve to characterize our age, that so distinguished a man dared with such impudence to delude, and still should find his defenders! I would rather forgive a man to be found perjured in the Old Bailey, than forgive Bruce; and the time may perhaps come, when similar literary crimes are brought to the cognizance of the law as well as civil ones. They certainly originate in as bad principles, and do as much harm as many of the latter.

"The friendly advice you give me about the necessity of being constantly attentive to my journal, deserves my best thanks. No fatigue, or sun-rays, or sleepiness, have ever caused me to let my tablets repose in my pocket, when any observation presented itself fit to be noted down. But the inquisitive and suspicious eyes of the Arabs and blacks have often produced that effect; and unfortunately the traveller's eagerness to observe, or at least to write, must often be checked by fears for his safety. In travelling, at least as I am obliged to do, many little artifices must be practised to keep the travelling companions ignorant of one's views, and of the paper and pencil; and how far their prejudices go with respect to the sight of a man writing in the road, those only can have an idea of, who have ever tried similar expeditions, and adopted my mode of travelling, which I firmly believe presents the only chance of success in the long run.

"I have lately read Wishaw's Memoir of Tennant, which you mention to me. The respect and esteem I had for Mr. Tennant, whose acquaintance I made through Mr. Browne,

was not owing to any lectures he gave me ; and as I should think it an honour to have been instructed by him, I should certainly state it, if it was really the case. The fact is, that whenever I met with him at his own or Mr. Brown's breakfast table, a variety of topics of conversation were introduced ; Arabia and Africa much talked of—but mineralogy not farther noticed, than to produce sometimes a few specimens, and to ask me whether I knew what they were. I had then already begun to read a little on mineralogy ; nor should I have taken notice of this here, if I did not think that the manner in which I am introduced in this memoir was rather unfavourable to myself. If Mr. Tennant, who is stated to have been distinguished for such ease and preciseness of elocution, and a rare talent for making himself clearly understood, even on the most abstract subjects, was at 'considerable pains' to instruct me, it naturally follows that his disciple must have been considerably thick-headed and slow in conception. In the whole, it would have been much better for me if Tennant really had been my instructor. My knowledge of mineralogy was very scanty when I left England. I have since forgotten a good deal of it : and the public will be much mistaken in expecting any deep geological and mineralogical disquisitions on the African mountains from the supposed élève of Tennant.

"The next time I go to the pyramids, I shall take particular care to examine those objects you point out to me. As to the well in the great pyramid, it will be difficult to trace its extent. Two Frenchmen were killed by the foul air in letting themselves down. What you tell me about Gothic arches, in answer to what I mentioned, proves only that a person should never talk about things he does not understand. You would therefore be very wrong to quote my authority as strengthening in any point your opinion. The room I saw in the largest pyramid of Sakkara had a roof of two plane surfaces meeting in a point.

"The sunburnt brick ruins of Upper Egypt, especially at Thebes, in the neighbourhood of the Memnonium, which have never been noticed by travellers, yet appear to me the only remnants of the private habitations of Thebes, have all round arches. There still exists at Cairo a mosque built by Amroo Ibn el Lasr, the conqueror of Egypt in the seventh century. It has pointed arches, and is, perhaps, the strongest argument to be met with in Egypt in favour of the opinion that the Saracens knew that arch before it was introduced in England. Mr. Bankes, who has lately been here, and is now in Syria, has made the history of architecture his principal object ; and as he is fully acquainted with his object, and draws beautifully,

and is besides well stocked with learning, he will no doubt be able to set similar questions at rest. He has visited the Nile borders up to the second cataract, and has lately gone in Syria over those ruins in the country to the east of the Jordan (Djerash, Omkais, and the Hauran) which Seetzen had discovered, and I had seen after him, and of which he speaks with raptures in his letters to me. He is certainly a very superior man, who bears his faculties, and rank, and fortune, most meekly; and is both indefatigable and accurate in his researches. Egypt is so remote a corner, that very few travellers take the trouble of visiting it. Since last year two only have been here. Yet the journey to Upper Egypt presents, in winter time, more satisfaction, even to those who travel only for their pleasure, than any other eastern country.

“During the last plague, which has just subsided, I made a journey to the peninsula of Sinai, which, beyond the common route from Suez to the Convent, is still very little known. This group of granite rocks stands isolated from all other granite to the distance of many hundred miles. The secondary chain is sandstone; and, close to the sea, all around the peninsula, is chalk. About the mountain of Moses, fine rock-crystal is met with. In traversing the desert from Cairo to Suez, I took this time my route close to the southern mountain, when I found a quantity of petrified wood, whole trunks of date-trees, every fibre of which can be distinguished from the stone. Several travellers have denied its being petrified wood, but that which I saw bears the most convincing proofs of its having been a vegetable substance. The specimens I picked up are much resembling those which are found in the Libyan desert, in that tract of the supposed ancient bed of the Nile, called now Bahhr bela Ma, where a whole forest of still-standing petrified palm-trees exists; which was visited in 1812 by Mr. Bontin, a French traveller, who was murdered last year in Syria. A box which I mean to despatch to Mr. Renouard, will contain several specimens of rocks for you. If ever I pass by Antiparos, I shall fill my trunk with stalactites of Arragonite, but I see very little probability of my getting into Greece before I am finally returned to England. Had I known last year that I should be so long detained here, I should, perhaps, have paid you a visit, and rather have spent my time at Trumpington than at Cairo. I have given your compliments to the gentlemen of your acquaintance here, whom you still remember. Mr. Rosetti, who is still living, and blackening every day his eye-brows and whiskers, perfectly recollects you; but the influx of Englishmen about your time was such, that Mr. Pini, whatever efforts he made with his memory, could not do as much. Mrs. Pini, on

the contrary, never forgot the reel-dance you once exhibited here.

"I hope you have not given up the idea of showing Mrs. Clarke the lions of Paris. Every Englishman's trip to France must be to him a triumphal procession; and I would rather send my son to go and look at the field of Waterloo, than let him visit the finest museums and galleries of Europe. The political news of last year could not fail to excite my liveliest interest; it has exercised its influence even as far as Egypt; and the Pacha, who rejoiced to see England and France at war, is now in the greatest terror from the dread of an English invasion. He has been for several years at great pains and expense to fortify Alexandria, and at this moment two thousand peasants are employed in levelling all those hills in the neighbourhood of Pompey's pillar (or, with your permission, Diocletian's pillar) which overlook and command the town. About seven thousand cavalry and five thousand infantry are posted along the coast; and batteries have every where been constructed. I understand that the workmen engaged have dug out many valuable antiquities, which, however, it is very difficult to get for a reasonable price; for every soldier, and every Christian shopkeeper, has, by this time, become a collector of antiquities. Nothing interested me more at Alexandria, than the commonly called baths of Cleopatra, which extend all along the shore, from the old harbour to the ancient mouth of the canal. They are stupendous works, and alone can give an idea what Alexandria once was. The catacombs appear paltry Grecian imitations of old Egyptian tombs; they are interesting at first landing in Egypt, but lose their interest after the originals have been seen in Upper Egypt. Upon the gate of the large saloon, in the north extension of that catacomb, is the winged globe you mention. In returning from Alexandria I saw the Delta, and several ruins in the province of Sherkei. At Temey, the antiquities of which, especially the fine monolithic cage, Lord Valentia has described, I met with very extensive mounds or hillocks, on the precincts of the town, entirely composed of bones, which appear to have undergone the action of fire. The inhabitants say that they are the bones of Infidels, burnt alive when the Mussulmans took the town."

Mr. Burckhardt, it is well known, died at Cairo, in 1817, at the moment when, after nine years of the most laborious preparations under the auspices of the African Society, he was

about to take his journey across the desert of Africa in his way to the banks of the Niger, the main object of all his toils.

Mr. Eustace, a name well known to every Englishman who has passed the Alps, was another traveller as intimately connected with Dr. Clarke as Mr. Burckhardt, and more resembling him in the qualities of his mind, particularly his imagination and taste, as well as in the harmony and richness of his language. It is to this intimacy the public is indebted for his very popular and charming work upon Italy. He had returned from the continent several years before he thought of publishing, for though always a studious and laborious man, he was at that time diffident of himself, unacquainted with the public taste, and averse from making an experiment upon it in his own person; but from the moment Dr. Clarke saw his journal, he did not hesitate to pronounce upon its success; nor would he suffer Mr. Eustace to rest till he had prevailed over his objections, and obtained his consent to its publication, taking upon himself all the preliminary steps, and concluding a liberal treaty for him with his bookseller (Mr. Mawman,) from which all the parties have since derived the greatest satisfaction.

"Eustace, alas!" says he, in a letter to the author of this Memoir, "is with the years beyond the flood: he died at Naples about a month ago: I feel the happier in reflecting, that the monument he has left behind him, would, but for my exertions, have been buried with him."

The honest triumph conveyed in this passage, seems to have escaped him in a moment of regret, for though many were the literary kindnesses and services he was enabled to bestow upon others, this was the only one in the recollection of his biographer of which he ever spoke.

CHAPTER X.

Third Volume of Dr. Clarke's Travels—Lord Byron—Bishop Mansell—Dr. Clarke's Blow Pipe—Discoveries respecting Cadmium—Election to the office of Sub-Librarian—Inscription for Sir John Moore—Dissertation on the Lituus—Illness—Death—Character.

SHORTLY after the return of Dr. Clarke to his residence in the town of Cambridge, the third volume of his Travels made its appearance from the press, which, as it was more anxiously expected and better received by the public than either of the former, so was it also most approved by himself. The subjects evidently pleased him, and he seems also to have been pleased with his own management of them, particularly with the History of the Pyramids, of which he expressed his conviction, that it would live, when "he himself should be gathered to his fathers." With the second it was quite otherwise, for he was never satisfied respecting it, either before or after its publication, and when some strong praise of this volume was reported to him by his bookseller in town, he only expressed a wish, that he could find an echo to it in his own breast; more favourable, however, was the opinion formed of it by his friends, especially Lord Byron, whose remarks, coming as they do from a competent witness of no ordinary stamp, and marked as they are with a tone of feeling, which is honourable both to the subject of this Memoir and himself, will not be unacceptable to the reader.

From Lord Byron to Dr. Clarke.

" ST. JAMES'S STREET, June 26, 1812.

" Will you accept of my very sincere congratulations on your second volume, wherein I have retraced some of my old paths, adorned by you so beautifully, that they afford me double delight. The part which pleases me best, after all, is the preface, because it tells me you have not yet closed labours, to yourself not unprofitable, nor without gratification, for what is so pleasing as to give pleasure? I have sent my copy to Sir Sidney Smith, who will derive much gratification from your anecdotes of Djezzar, his 'energetic old man.' I doat upon

the Druses ; but who the deuce are they with their Pantheism ! I shall never be easy till I ask *them* the question. How much you have traversed ! I must resume my seven leagued boots and journey to Palestine, which your description mortifies me not to have seen more than ever. I still sigh for the *Ægean*. Shall not you always love its bluest of all waves, and brightest of all skies ? You have awakened all the gipsy in me. I long to be restless again, and wandering ; see what mischief you do, you won't allow gentlemen to settle quietly at home. I will not wish you success and fame, for you have both, but all the happiness which even these cannot always give."

" Dec. 15, 1813.

" Your very kind letter is the more agreeable, because, setting aside talents, judgment, and the '*laudari a laudato*,' &c. you have been on the spot ; you have seen and described more of the East than any of your predecessors—I need not say how ably and successfully ; and (excuse the bathos) you are one of the very few who can pronounce how far my costume (to use an affected but expressive word) is correct. As to poesy, that is as, 'men, gods, and columns,' please to decide upon it ; but I am sure that I am anxious to have an observer's, particularly a famous observer's, testimony on the fidelity of my manners and dresses ; and, as far as memory and an oriental twist in my imagination have permitted, it has been my endeavour to present to the Franks, a sketch of that of which you have and will present them a complete picture. It was with this notion, that I felt compelled to make my hero and heroine relatives, as you well know that none else could there obtain that degree of intercourse leading to genuine affection ; I had nearly made them rather too much akin to each other ; and though the wild passions of the East, and some great examples, in Alfieri, Ford, and Schiller (to stop short of antiquity), might have pleaded in favour of a copyist, yet the times of the north (not Frederic, but our climate) induced me to alter their consanguinity and confine them to cousinship. I also wished to try my hand on a female character in Zuleika, and have endeavoured, as far as the grossness of our masculine ideas will allow, to preserve her purity without impairing the ardour of her attachment. As to criticism, I have been reviewed about a hundred and fifty times—praised and abused. I will not say that I am become indifferent to either eulogy or condemnation, but for some years at least I have felt grateful for the former, and

have never attempted to answer the latter. For success equal to the first efforts, I had and have no hope; the novelty was over, and the 'Bride,' like all other brides, must suffer or rejoice for and with her husband. By the bye, I have used *bride* Turkishly, as affianced, not married; and so far it is an English bull, which, I trust, will be at least a comfort to all Hibernians not bigotted to monopoly. You are good enough to mention your quotations in your third volume. I shall not only be indebted to it for a renewal of the high gratification received from the two first, but for preserving my relics embalmed in your own spices, and ensuring me readers to whom I could not otherwise have aspired. I called on you, as bounden by duty and inclination, when last in your neighbourhood; but I shall always take my chance; you surely would not have me inflict upon you a formal annunciation; I am proud of your friendship, but not so fond of myself as to break in upon your better avocations. I trust that Mrs. Clarke is well; I have never had the honour of presentation, but I have heard so much of her in many quarters, that any notice she is pleased to take of my productions is not less gratifying than my thanks are sincere, both to her and you; by all accounts, I may safely congratulate you on the possession of 'a bride' whose mental and personal accomplishments are more than poetical.

"P. S. Murray has sent, or will send, a double copy of the *Bride and Giaour*; in the last one, some lengthy additions; pray accept them, according to old custom, 'from the author' to one of his better brethren. Your Persian, or any memorial, will be a most agreeable, and it is my fault if not an useful, present."

"I trust your third will be out before I sail next month; can I say or do any thing for you in the Levant? I am now in all the agonies of equipment, and full of schemes, some impracticable, and most of them improbable; but I mean to fly 'freely to the green earth's end,' though not quite so fast as Milton's sprite."

The following letter upon the same subject is from Mr. Payne Knight, whose learned labours upon Homer must give a value to his approbation of a volume deriving so much of its materials from scenes connected with the Homeric story. For the same reason, even the slight geographical discussion contained in it will be interesting to the classical reader.

"BONO SQUARE, JUNE 21.

"My dear Sir,—I sent the cast on Friday, packed up in the same case which brought me the beautiful original, and hope you have received it safe. Being upon the point of leaving town, I have bestowed most of the two last days upon your second volume, following you with equal interest and profit over the interesting scenes which you so well describe, particularly those of the Troade, upon which you have thrown much new light. I still, however, think that the hills of Bournabashy were the sites of Ilios and its citadel Pergamos ; and the plain behind (of Reyoom, I think you call it) the *πρωτοί δαμοί*, over which Agenor meditates his escape from Achilles to the Forests of Ida. Hector is on the other side of the Scamandar from the city when he fights on the left of the battle, on the banks of that river, and Priam crosses it when he goes to the Tents of Achilles. In short, every thing seems to suit that situation and no other ; nor is its distance at all too great for the marchings and counter-marchings described according to the then mode of warfare. Upon the tumuli I lay no stress, though I admit that they bore the names which they now bear long before the Macedonian conquest. How much it is to be regretted that we have no very accurately detailed map of that interesting country. Every mound, spring, and rivulet should be traced.

"Ever faithfully and gratefully yours,

"R. P. KNIGHT."

But of all the compliments paid to him on the subject of his *Travels*, the lines which follow, from the late Bishop of Bristol, gave him the greatest pleasure, not so much on account of the quality or degree of praise conveyed by them, as for the sake of the person associated with him in the honour of it. Dr. Clarke's answer to the lines is subjoined ;—

*To Professor Edward Daniel Clarke, on his
Book of Travels.*

For hours with thee, in pleasure past ;
For sense, for nature and for taste,
Delighted Traveller, receive
All that a grateful mind can give ;
A mind that loved with thee to roam,
And found, in every clime a home :
In every clime, a welcome found,
On Holy, or on Classic ground :
For such the meed must ever be,
Of worth like thine and courtesy.

But, oh ! with all thy matchless skill,
 To bend attention to thy will ;
 With all that the Historic muse
 Can, o'er thy brilliant page, diffuse :
 Oh, say, what could thy powerful art,
 E'en *thine*, t' engage and keep the heart,
 Did'st thou not bribe the enraptured eye,
 With all the charms of symmetry ;
 The sculptured grace, the magic form,
 With life, with taste, with beauty warm ;
 Did *she* not bid, with skill divine,
 Her pencil glow along the line ;
 Herself a thousand powers in one,
 'Thine own ANGELICA alone ?

W. B.

The Answer.

When taste and genius both combine
 To yield the meed of praise,
 Their theme, embalmed by every line,
 Exists in deathless lays :

Thus, haply, in thy magic rhyme,
 The Pilgrim and his Tale,
 Baoyant along the stream of time
 May still attendant sail ;

But she, whose "myriad powers in one"
 Inspir'd thy gifted song,
 ANGELICA*—to her alone
 Shall all the praise belong !

E. D. C.

The next year the University of Cambridge was visited with a typhus fever, which proved fatal to some of the younger members, and created great alarm among all who were either resi-

* Connected with the main object of these verses, is the following *jeu d'esprit* of Professor Porson, every scrap of whose learning is acceptable. It is a Latin Charade upon the word *cornix*, addressed to Angelica (Mrs. Clarke,) under the name of Iris. Iris, said he, is called *Ἀργυρὸς* in Homer. It is beautifully written upon a small heart-shaped piece of fine vellum, about the size of a shilling, by the Professor himself.

From
 a MS.
 700
 Years old.

Aenigma ex eo 'ge-
 nere quod ex duabus
 monosyllabis vocibus unam
 vocem dissyllabon efficit. Pri-
 mum, secundum, tertium, si-
 ve totum. Gallice, *Charade.

T'è primum incante nimium, propiusque tuenti,
 Iri, mihi furtim surripuisse queror ;
 Nec tamen hoc furtum tibi condonare recusem,
 Si pretium simili solvere merce velis.
 Sed quo plus candoris habent tibi colla secunde,
 Hoc tibi plus primum frigoris intus habet ;
 Jamque sinistra cavè cantavit ab Ilice totum
 Omina, et audaces spes votat esse ratas.

A. K.

dent in, or connected with it. Dr. Clarke had just begun his annual labours to a crowded audience, with an introductory Lecture upon the origin and formation of meteoric stones, at which were exhibited the most celebrated aerolites in the kingdom, and was advancing with great spirit and popularity in his course, when this calamity forced him to his bed, and dispersed his audience.

"We have been all dying," he says in a letter to Mr. Cripps, "Angel had the fever first, but did not give it to the child (his fourth son) at her breast, proof therefore that it cannot be catching. I then was seized with it, in the midst of my Lectures, and had one hot fit which lasted thirty-six hours. You that have seen what my sufferings used to be with a hot fit of eight hours, may guess what sort of a struggle I should have with one of thirty-six hours. I am now slowly recovering, but many are dead." What notions he himself had formed of this fever is difficult to say, nor is it perhaps now material: but having suffered from it himself, and witnessed its effects on many others, he had been led to some conclusions respecting it, which he submitted to the public in the *Courier* newspaper under the signature of Senex.

In the course of the same year he took great interest in the fate of a collection of vases, which had been brought from Athens by Mr. S. Graham, and were to be sold by auction in London, in the spring. This gentleman had resided for several months at Athens, and his excavations, which had been carried on with great perseverance and spirit under the direction of Mr. Fauvel, a French artist, to whom Dr. Clarke had recommended him, had been more successful than those of any other persons who have either preceded or followed him. The number of vases found by him was very considerable; and though it seems to be allowed, that the specimens from Greece do not usually exhibit such fine workmanship as those of Magna Græcia in the south of Italy, yet were there among the fruits of his researches some which in point of elegance of form, as well as classical illustration, were entitled to a high degree of distinction; independent of the superior interest derived from the place where they were found, which was without the city of Athens, a short distance on the road to Thebes. Of these vases Dr. Clarke drew up a learned and interesting description, which formed in fact the catalogue at the sale. A few of the lots were purchased by himself, and remained in his possession at his death, with a small collection of his own brought from Epidauria, and some bought in by Mr. Graham, were afterward given to the author of this Memoir; among which was one small specimen of great

beauty, and highly estimated by Dr. Clarke, on account of a theory which it was supposed to illustrate; it represented one of the Libethrides, bearing what is called the Ionic volute in her hand, and he had formed a conjecture, that all the antique borders, friezes, and cornices, were derived from a superstition connected with this symbol, which he imagined to be a plant; at his request the vase was placed in his hands for the purpose of being engraved, and his letter affords a curious proof of the rapid and ingenious combination of his ideas upon such subjects, and of the readiness with which he was accustomed to turn his accidental observations to account.

† *To the Rev. William Otter..*

“HARLTON, Sept. 17th, 1815.

“I now return to you your most valuable vase, with many thanks; Angelica has made a beautiful drawing from it; which will be the tail-piece of the preface to my fourth volume; wherein the subject is discussed to which the curious symbol relates: I never was so interested in any subject in my life, as I have been by these terra-cottas. I believe I have at last made out their whole history. The discovery of a vase at Athens with this most Archaic inscription—‘I am a prize given by Athens,’ or, ‘I am the prize of the Athenæa,’ for Blomfield, who is for the first, and Knight, who is for the second, are two, as to the reading; the discovery, I say, of this inscription has recorded the use of these vases in such conspicuous characters, that it may be said to be ‘written in sun-beams.’

“When, therefore, this precious little libatory arrives, please to take off your hat before it, and make your best bow; for no unhallowed hand may touch it. Above two thousand years have sped since it was won by an Athenian whom the songs proclaim ‘a victor,’ in the Panathenæa. Get a Shrewsbury cabinet-maker to secure it in a glass cabinet in the best corner of your mansion, lock it up, and throw the key into the Severn. If it should ever be broken, expect the utmost of Minerva’s resentment.

“I have worked like a dragon to get to the end of my fourth volume, ‘wasting the midnight oil’ in continual quill-driving and cogitabundity.”

In the early part of the next year the fourth volume of his *Travels* came out, and the Fitzwilliam bequest having arrived at Cambridge, he was appointed one of the syndicate for the arrangement and disposal of that most interesting and valuable property.

To show his extraordinary devotion to his Lectures in Mineralogy, it may be mentioned, that he began this year to study oil painting, for no other purpose than to embellish his Lecture-room with fresh ornaments and attractions, and by a series of designs to give a faithful and accurate representation of the native character and situation of his most remarkable minerals, and of the scenes amidst which they occur. But a more striking proof of his attachment remains to be told; for at the same time he undertook to carry on all the chemical experiments necessary for a knowledge of his subjects, during the Lecture itself, that he might have the analysis of them fresh in his own knowledge and recollection, and as much as possible brought before the eyes of his pupils. This task he never afterward relinquished, and it will appear subsequently how severe and laborious it proved to be.

The year 1817, which was important to him in several respects, opened with the most flattering testimony of the esteem in which he was held in the University, by his election to the office of Librarian, vacant by the death of Mr. Davies. The situation, though not lucrative, was particularly agreeable to Dr. Clarke, on account of its connexion with the Library; but the most grateful circumstance arising from it, was the manner in which his application was received by the numerous circle of his friends. From the moment his pretensions were known, the warmest promises of support flowed in upon him from all quarters, of which a large mass of testimony remains; and so decidedly was the sense of the University shown in the course of a short canvass, that the other candidates withdrew before the day of election; thus the field being left open to him, he was unanimously elected, on the 13th of February, 1817; and the heartiness of his joy upon the occasion, it would be vain to express in any other words than his own.

"Feb. 14, 1817.

"Yesterday was one of the happiest days of our lives. I might truly say—

'I envy not,
The king his lot,
When ding dong went the bells.'

"In the morning at twelve our baby was christened. At

two P. M. I was unanimously elected Librarian in the senate. In the evening, we had all our friends to a dance and supper, which went off in most gallant style till four. This morning, as soon as I was elected, the bells of St. Mary's, and of St. Benedict's, fired off most jovial peals, and all was mirth and gratulation.

"I hope you will hear me open my course of Lectures in high force. See the next number of Thompson's Annals, for a farther account of my experiments."

The subject alluded to in this letter, as forming the substance of a paper in Dr. Thomson's Annals, and intended to be brought forward in his next Lecture, was the Gas Blow Pipe; a subject which, considering the large share of his labours it occupied during the few remaining years of his life, which it in truth contributed to diminish, requires, perhaps, in justice to his memory, to be somewhat fully detailed. The history of this machine commences at an earlier period, but it has been purposely reserved for this year, when the interest arising from it, both in his own mind and in those of others, was at its height. So early as the year 1814, Dr. Clarke had been in the habit of submitting many of his minerals to the action of the common blow pipe, a practice from which he proposed to himself amusement as much as information, and which he recommended to his friends as an admirable way of passing an idle evening. In the course, however, of this scientific sport, which began to wear more importance in his eyes as he advanced, his eagerness for inquiry soon outstripped the powers of the humble instrument employed by him; and being destitute of other chemical apparatus, his attention was anxiously directed towards every hint or observation which was likely to improve and to make the most of that which he had; especially in 1816, when having made a discovery of a new colouring principle in soda, about which he corresponded with Dr. Wollaston, he found still greater encouragement for the continuance of his pursuit. In this state of mind a little work of Lavoisier's fell into his hands, entitled, '*Essai d'un art de fusion à l'aide de l'air du feu, par M. Ehrman, suivi des Mémoires de M. Lavoisier, Strasburg, 1787,*' in which is described the use of hydrogen and oxygen gases propelled from different reservoirs in the fusion of mineral substances, and in aid of the common blow pipe. Here was one step gained, and while his thoughts were occupied with this work, he saw accidentally at Mr. Newman's, in Lisle Street, a vessel invented by Mr. Broke for a different purpose, but which he thought capable, with some alteration, of bringing these new agents into

use in the way he wished : accordingly, he set Mr. Newman to work upon it with his ideas, who after several trials, produced the celebrated instrument called the Gas Blow Pipe ; in which the two gases being united in a common reservoir, in the proportion in which they constitute water, are propelled through a jet of very small diameter, and by their combustion at the orifice, as in the coal gas lamp, produce an intensity of heat, infinitely superior to that of the common blow pipe. The exact proportion of hydrogen to oxygen (*viz.* two to one in bulk), to which he always attached great importance in the conduct of his experiments, and which he thought could be equably supported, only by having a common reservoir, was a suggestion entirely his own, and derived from a theory long ago adopted by him at Naples, that the volcanic explosions of Vesuvius, with the intense heat which accompanied them, were mainly caused by the pressure and subsequent combustion of these two gases, formed from the decomposition of water, which was always observed to be withdrawn from the neighbouring wells, and even lakes, in great abundance, on the eve of an eruption. In this stage of his progress he communicated his views to Sir H. Davy, and Dr. Wollaston, in May, 1816. The latter was averse from the experiment altogether, under the well-founded apprehension, that the retrograde motion of the flame would cause the apparatus to explode ; and while he suggested several minerals, particularly iridium and wood tin, as proper subjects of experiment, earnestly recommended a different process in the management of the explosive gases, and warned him against that which he had described. The former (Sir Humphry Davy) reported to him in July of the same year, that he had made the experiment. In the meantime, Dr. Clarke proceeded for several weeks in his own way, to submit some of the most refractory substances of the mineral kingdom to the action of the new machine, and with no other inconvenience than a few harmless detonations ; but at last the accident predicted by Dr. Wollaston occurred ; and Dr. Clarke himself, with two other gentlemen and a servant, were exposed to the most imminent danger, by the bursting of the copper reservoir, under a high state of pressure, large pieces of which passed close to some of them, and buried themselves in the walls. In September he wrote thus to the author of this Memoir :

“I sacrificed the whole month of August to chemistry. Oh, how I did work ! It was delightful play to me ; and I stuck to it day and night. At last having blown off both my eyebrows, and eyelashes, and nearly blown out both my eyes, I

ended with a bang that shook all the houses round my Lecture-room. The Cambridge paper has told you the result of all this alchemy, for I have actually decomposed the earths, and obtained them in a metallic form."

Rendered cautious by this accident, but in no way dismayed by it, his only care was to prevent a repetition of the danger; and being supplied with a simple but ingenious invention of Mr. Cumming (Chemical professor at Cambridge,) called the safety cylinder, which by the intervention of a column of oil, intercepts the retrograde motion of the flame, without interfering with the passage of the gas, and farther secured by a screen of wood interposed between the main body of the apparatus and the operator, he continued his experiments with more spirit and greater success than ever, submitting the results of them from time to time to the public, in the *Journal of the Royal Institution*, and in *Dr. Thomson's Annals*. These results, which with many others were afterward collected and published by himself, will be passed over with no other observation than that his experiments upon brass (copper with zinc) are considered by Mr. P. Knight of great importance, inasmuch as they present to the antiquary an easy test for distinguishing ancient bronze from a spurious imitation in brass; but the effect of his labours upon Barytes (the heavy earth,) necessarily falls within the scope of his biographer, because from this arose the memorable difference of opinion between Dr. Clarke with his friends on one side, and the chemists of the Royal Institution on the other. It is well known that the metallic nature of the earths is a discovery entirely due to the illustrious president of the Royal Society; and that among other names conferred at first by anticipation, he gave the name of Barium to the metallic base of Barytes. This earth, on account of its refractory nature, became very early an important subject of Dr. Clarke's experiments, the effect of which was a firm conviction in his own mind, that he had procured the metal Barium, or Plutonium, as he afterward called it, by fusion with his gas blow pipe. All the merit that he could possibly claim was, that he had arrived at the same result with Sir H. Davy, by a more simple process, and had exhibited the metal without any amalgam, with greater lustre, and in a more permanent form. But this, it must be confessed, many distinguished chemists, and particularly those of the Royal Institution, were not disposed to allow; for having carried on similar contemporary experiments upon the same substance, without deriving the same satisfaction from the results, they concluded that Dr. Clarke and his friends had been deceived by the

pseudo-metallic appearance, which is allowed on all hands sometimes to accompany the action of the blow pipe, particularly in wood tin; and that, in point of fact, he had not procured the metal Barium at all. On the other hand, Dr. Clarke, confiding in the results of his own labour, contended that the experiments of the Royal Institution had failed, either from the impurity of the earth (for he himself had found, that he could never succeed unless the substance was entirely free from water,) or from their not using the safety apparatus, and therefore not obtaining sufficient power; and appealed not only to his own pupils and friends, but also to many strangers and visitors, as well as to some well known chemists, all of whom had witnessed his experiments. In the mean time, several curious and interesting discussions took place between Dr. Clarke and his philosophical friends respecting the metallic lustre of his results, while specimens of the metal procured by him were exhibited at Sir Joseph Banks's, by Dr. Thomson, and others; and in the month of April, 1817, Dr. Wollaston himself, who was always upon the most friendly terms with Dr. Clarke, came down to Cambridge by appointment, upon a visit to him, on purpose to be present at the operation; shrewdly observing, that one pair of experienced eyes was as good as two hundred (the number of the audience,) some of whom, not being able to see, were no evidence at all. What his opinion was immediately after this meeting, does not appear, but it is probable from their farther correspondence, that his doubts, which rested on the substance fused not answering certain nice metallic tests, were not removed. At all events, the same skepticism, or rather infidelity, remained at the head quarters of the Royal Institution, and at last, to bring the matter to issue, Dr. Clarke fairly proposed to come to London himself, with his apparatus, and to exhibit the experiment in the presence of its most distinguished members, and in their own laboratory. For some reason the meeting never took place, and as no attempt was afterward made to bring the parties together, and no other experiments have been carried on with the same spirit since Dr. Clarke's death, the subject remains, it is believed, nearly as it was. But whatever becomes of this question,* it is surely fair to infer, that some

* The following account of Dr. Clarke's discovery of the metal of Barytes is given by Dr. Thomson. See his Chemistry, v. i. p. 342, edit. 1817. Dr. Clarke has decomposed Barytes, by exposing it to an intense heat, produced by the combustion of a stream of oxygen and hydrogen gas, mixed together in the requisite proportion to form water. He has given to the metal of Barytes the name of Plu'onium." He then proceeds to relate its properties, and describes it as a "solid metal of the colour of silver; melting at a temperature below redness, and not being volatilized by a heat

merit is due to Dr. Clarke for his rapid and ingenious combination of means in the invention of the Gas Blow Pipe; and a much higher degree of praise for his extraordinary zeal, industry, and perseverance, manifested in the use of it, by which he has produced results infinitely more curious and brilliant than those which any other chemist had effected by the same agents; all the earthy minerals having been fused by him as well as all the metals, many of which could scarcely be affected by the best furnaces. Berzelius, in Sweden, Mr. Hare, in America, and, it is believed, Dr. Thomson, had all tried the effects of these gases by a different method, but not with the same results. Not to lose sight of this subject it may be stated, that whatever feeling of disappointment might have arisen in his mind from the doubts or incredulity of others, it never seems to have put him out of humour with his invention, or to have interrupted the career of his exertions, for during the remainder of this year, and throughout the whole of the next, his experiments were continued with such ardour and perseverance, that no less than twenty papers, entirely resulting from them, were communicated to the public in Dr. Thomson's *Annals*, a list of which will be given in the Appendix; and in 1819, he collected his observations in a small octavo volume, entitled the *Gas Blow Pipe*, with engravings of the instrument, the safety apparatus, &c. It contains at some length the history of the discovery, with the particulars and properties of the machine; also an interesting and lively description of some remarkable phenomena witnessed by himself attending an eruption of *Vesuvius*, which led to his theory of the gases, and an appendix describing his experiments upon ninety-six substances of the mineral kingdom, with their results. His last remarks, directly relating to this machine, are contained in a paper in Dr. Thomson's *Annals*, 1821 (new series,) entitled "*Observations upon the Gas Blow Pipe, and upon some of the more remarkable results which have been obtained in using this instrument during a course of five years, in which it has been constantly employed; being a continuation of former remarks on the same subject.*"

Not long after the appearance of this volume, a new substance was submitted to his inquiry, which gave fresh spirit to

capable of melting plate-glass, but at that temperature acting violently upon the glass: probably decomposing the alkali of the glass, and converting it into a protoxyde. When exposed to the air, it rapidly tarnishes, absorbs oxygen, and is converted into Barytes. It sinks rapidly in water, and seems to be at least four or five times heavier than that liquid. It decomposes water with great rapidity; hydrogen is emitted; and it is converted into Barytes. When strongly pressed, it becomes flat, and hence appears to be both ductile and malleable."

his operations, and produced results not less interesting than they are unquestionable; of which the following statement will suffice:—

The discovery of a new metal in one of the ores of Zinc, by Professor Stromeyer, about the latter end of the year 1817, was known to the English chemists; but the rarity of the mineral from which it had been obtained, had prevented the greater part of the scientific world, from all farther examination of its properties. In the autumn of 1819, however, Dr. Thomson had published, in the *Annals of Philosophy*, a paper by Stromeyer, on this subject, under the guidance of which, Dr. Clarke procured some of the fibrous blende from Przibram, in Bohemia, and separated from it the new metal, called Cadmium by Stromeyer, to mark its connexion with Zinc, the ore of which had in early times been called *Cadmia Terra*. Having now the means of becoming acquainted with the properties of this new substance, and the foreign ore having been exhausted, Dr. Clarke undertook the examination of some of the English ores of Zinc, in which the radiated fibrous structure led him to suppose that Cadmium might also be present. In this expectation he was not disappointed, and thus was enabled to add to our catalogue of the productions of this country, the new metal of Professor Stromeyer. This discovery was first announced by Dr. Thomson, in the *Annals* for March, 1820, and the details of Dr. Clarke's experiments appeared in the same publication for the subsequent month. After this period, other subjects of scientific research occupied his attention for a considerable time, but in the latter end of 1821, he returned to this inquiry. His observations upon the ores which contain Cadmium, and upon the various tests of its presence, are dated 1822, and are published in the *Annals* for February. A subsequent paper appeared in March, bearing the date of February 6, containing the details of an experiment by which he had separated the new metal from metallic or sheet-zinc.

It is by no means the wish of his biographer to exaggerate the merit of discoveries, which, had they been ten times more important than they are, would be no compensation to his friends for the costly sacrifice by which they were purchased, the injury of his most valuable health; but surely every candid person must allow, that in this distinguished age of chemical inquiry, when so many skilful and sagacious men are exclusively occupied in extending the boundaries of the science, it is an extraordinary trait in the character of Dr. Clarke, that, occupied as he was in other matters, he was able to make any discovery at all, especially when it is remembered, that his

chemical experiments were entirely subsidiary to his Mineralogical Lectures, that they were taken up late in life, pursued under the pressure of the most dreadful health, and with scarcely any other apparatus than the instrument of his 'own inventing and providing, the Gas Blow Pipe. In truth, the qualities he possessed were not less calculated to ensure success in the paths of science, than in those spacious fields of enterprise which his travels had presented to him. Bold, speculative, laborious, persevering, and ingenious, there was nothing which appeared difficult to him; and so passionately was he devoted to chemistry, that, to use his own words, he has actually gone to bed and dreamed of results, which he has afterward waked to obtain. Nor was his want of caution an evil of great importance to him, for such was the candour and communicativeness of his mind, and such the general publicity of his proceedings, that his errors were neither bigotted nor permanent; and many persons there were, very capable of setting him right in various steps of his progress, who were not able to keep pace with him in his subsequent career.

Notwithstanding the deep and lasting interest excited in his mind by these inquiries, which formed from this time quite a new feature in his life, he was never more actively engaged, in his other avocations and duties, never more alive to the general interest of literature, than during the three years in which they were carrying on *. In 1817 he contributed two papers to the Archæologia, and one to the Geological Society:—

* The following cursory observations upon female education, written at this time in answer to some inquiries from a mother, afford an amusing specimen of his reasoning upon this important subject. Of course, many cases must occur in which extension of this very limited range of female inquiry must be desirable:—

“ In answer to your inquiry, respecting the education of your eldest daughter, my observations will be brief. Let her be educated as you and your sisters were educated, and she will, if she resemble them, possess every accomplishment, and all the information which is requisite to secure the affections of her future husband. Believe me, there is no greater mistake than that of supposing young women are rendered amiable by being what is called ‘learned.’ If I had a daughter (which is beyond my means of attainment) I would as soon make a dragon of her, as a ‘learned woman.’ I have seen many of these ‘learned women’—horse godmothers every one of them!—but I never knew any thing lovely or desirable in them. Pope has hit them off—

‘Artemisia talks by fits
Of fathers, sages, critics, wits,
Reads Malbranche, Boyle, and Locke;
Yet in some things, methinks she fails,
’Twere well if she would pare her nails,
And wear a cleaner smock:’

“ As for mathematics, the very idea of such a study for Laura, is enough to make one’s blood run cold. Reading, writing, needlework, arithmetic, accurate spelling, &c. with a little common geography (which comes by reading,) and music and dancing; these things are almost necessary in a woman. We expect to find them in every woman of genteel birth, and they are generally found. I would not go beyond these. But as to the kind of reading, there may be much difference of opinion. For my own part, if my taste may guide you, I would make the sacred Scriptures, as often as possible, her exercise in reading, for this reason, independent of more important motives,

The first entitled, "Observations upon some Celtic Remains, lately discovered, by the public road leading from London to Cambridge, near to the village of Sawston: distant seven miles from the University."

The second, "An Account of some Antiquities found at Fulbourn in Cambridgeshire, in a letter addressed to Nicholas Carlisle, Esq. F.R.S. Secretary."

The third, "On the Composition of a dark bituminous Limestone, from the parish of Whiteford in Flintshire."

In the course of the next year a literary task of considerable delicacy and responsibility was intrusted to him, in the most pleasing manner, of which he acquitted himself with great judgment and ability.

The citizens of Glasgow having subscribed a large sum for the purpose of erecting a statue in honour of their illustrious countryman, Sir John Moore, selected Dr. Clarke (to use the words of the chairman of their committee) as the individual possessing the greatest knowledge and taste upon such subjects, and in every respect the best qualified to compose an inscription worthy of the memory of Sir John Moore. In consequence of this flattering invitation, he composed and transmitted to Glasgow several inscriptions, in different languages, from which, in December of the same year, a short one, partly Greek and partly English, was selected by the committee, and afterwards approved by the subscribers and the relations of Sir John Moore. The Greek words are from Thucydides, with a slight alteration:—

ΙΩΑΝΝΟΥ · ΜΟΟΡΕ
ΑΓΑΛΜΑ
ΑΝΔΡΩΝ · ΓΑΡ · ΕΠΙΦΑΝΩΝ
ΠΑΣΑ · ΓΗ
ΤΑΦΟΣ.

The committee wished to have an English inscription, but after some discussion with Dr. Clarke, who thought that it would involve too many details of honours, birth, parentage, &c. they were induced to alter their views. The statue was executed by Flaxman, of bronze, and colossal, to be placed upon a pedestal of granite. The thanks of the subscribers

that in them are contained all the sources of wisdom, history, geography, poetry, morality, pathos, sublimity, unaffected simplicity, truth; in short, open the volume where you will, a divine oracle seems to say, 'Hear! for I will speak of excellent things, and the opening of my mouth shall be of right things.'

were afterward conveyed to Dr. Clarke, with the information that fifty guineas were placed at his disposal for a piece of plate.

In 1819,* he brought out the fifth volume of his *Travels*; and soon after, in 1820, he published, in a letter to Mr. Archdeacon Wrangham, a *Critique on the character and writings of Sir G. Wheeler, Knight, as a traveller*. Only fifty copies of this tract, which is in truth but little known, were at first given to the public, but it was afterward reprinted in Mr. Wrangham's *Life of Dr. Zouch*. Soon after this he drew up a *Prospectus for his Scotch Tour*, and made many preparations with a view to the publication of it; collecting his Scotch minerals and drawings, which had been of course much dispersed during the long period that had elapsed since his return.

But of all the literary labours which occupied his pen in the course of this year, the most captivating to his own fancy was his *Treatise on the Lituus*, an interesting and highly ornamented work, originating in one of those accidents which never happened to any one but Dr. Clarke, and furnishing a striking example of the irresistible energy with which his objects were pursued. In the month of August, a watchmaker at Cambridge, accustomed to collect coins, &c. in the way of

* The following note, found lately among Dr. Clarke's papers, being connected with the transactions of this year, has been thought worthy of insertion. There is nothing new in the dictum of Lord Erskine in this conversation, but his illustration of it will be interesting to many who were acquainted with Mr. Burke or remember his oratory, and the story with which the account closes, will be probably considered as curious by all.

"Monday, July 5, 1819.—While we were waiting at Trinity Lodge, for the deputation from the senate to conduct the Chancellor, I had a conversation with Lord Erskine upon the qualifications of Burke as an orator. Lord Erskine said, that his defect was *episoda*. 'A public speaker,' said he, 'should never be *episodical*—it is a very great mistake. I hold it to be a rule respecting public speaking, which ought never to be violated, that the speaker should not introduce into his oratory insular brilliant passages—they always tend to call off the minds of his hearers, and to make them wander from what ought to be the main business of his speech. If he wish to introduce brilliant passages, *they should run along the line of his subject matter*, and never quit it. Burke's *Episodes* were highly beautiful. I know nothing more beautiful, but they were his defects in speaking.' Then he introduced one of his most beautiful *Episodes* taken from a speech on the American war; and repeated, by heart, the whole of that part of the speech in which he introduces the quotation, '*Acta Parentum*,' &c.—'all this,' said he, 'is very beautiful, but it ought to be avoided.—Now I will give you another specimen from his speeches on the same war, in which his oratory is *perfect*—where the most common, familiar, and even low technical expressions are made to blend themselves with the finest passages; and where, having full possession of the minds of his hearers, he never lets them go from him for an instant.' Then he repeated all that speech.

"Lord Erskine also told me that Burke's manner was sometimes bad—'it was like that of an Irish Chairman.'—'Once,' said he, 'I was so tired of hearing him, in a debate upon the India Bill, that, not liking he should see me leave the House of Commons while he was speaking, I crept along under the benches, and got out, and went to the Isle of Wight. Afterwards that very speech of his was published—and I found it to be so extremely beautiful, that I actually wore it into pieces by reading it.'

"I have heard Burke often myself; but I have thought it right to preserve these interesting remarks of Erskine in his own words."

E. D. CLARKE.

traffic, for a young friend of Dr. Clarke, showed him the impression of a gem that had lately passed through his hands, on which were represented some ancient symbols with the letters A V. After comparing this impression, which struck him as being extraordinary, with some coins and engravings in his own possession, the gentleman consulted Dr. Clarke, who, having taken a little time to consider, came to him at St. John's, and inquired with great eagerness where the gem was. The watchmaker having been mentioned, was immediately had recourse to, and from him they discovered, that it had been sold to a magistrate residing about ten miles from Cambridge, who happened accidentally to be an acquaintance of Dr. Clarke's friend; a chaise was immediately procured, and away they went together to the house of Mr. Gardener, the magistrate in question, who being overcome by Dr. Clarke's entreaties gave up his bargain, which was carried off in great triumph to Cambridge. From the moment this gem was in his possession, little else was thought or talked of, for some time; all his letters were sealed with the signet of Augustus; every authority, living or dead, likely to throw light upon the subject was consulted, and Mrs. Clarke's taste was called forth to make drawings from various sources for the illustration of it; and finally at the end of three weeks was produced his Dissertation on the Lituus; which, whatever becomes of the signet or its history, will live to evince his extraordinary industry and ingenuity, and farther to establish a distinction between two antique symbols, the Lituus and the Pedum, which had hitherto been much confounded. The work was read before the Antiquarian Society in 1820, and published in the *Archæologia* for 1821; and both before and after its publication was the subject of a correspondence with Dr. Blomfield and Mr. Payne Knight.

In the course of the same year, a number of resident members of the University, mutually known to each other, and chiefly devoted to scientific pursuits, associated together for the purpose of founding a Philosophical Society at Cambridge. Of this scheme, whose direct object was the promotion of science, and its natural tendency to raise the credit of the University, Dr. Clarke was of course one of the earliest and one of the most zealous advocates and supporters; and as it was thought advisable, that some address should be provided explanatory of the design and objects of the Institution, he was requested by a sort of temporary council, to draw it up. Accordingly he undertook the task, and his address having been read at the first meeting, was afterward printed by order of the Society, and circulated with the first volume of their

Transactions ; although for some reason it was not connected with the volume. Nor did his anxiety for the support and honour of the Society rest here ; he wrote letters to almost all the literary men of his acquaintance, to request their co-operation and support ; combatted with great spirit in several instances, the opposition that was made to it from others ; and during the short remainder of his life, contributed three Papers, which were printed in the first volume of their Transactions.

1. On the Chemical Constituents of the Purple Precipitate of Cassius.

2. On a remarkable Deposit of Natron, formed in cavities in the Tower of Stoke Church, in the parish of Hartland, in Devonshire.

3. Upon the regular Crystallization of Water, and upon the form of its primary Crystals.

In the midst of all these engagements, it is extremely gratifying to remember, with what readiness and earnestness he applied himself not only to his ordinary duties as a clergyman, but even to some additional ones which at that time fell to his share. He preached six sermons during these two years, at St. Mary's ; three of which, forming a series upon prayer, were exceedingly interesting and affecting when delivered, and must be considered as fine compositions now ; but what redounds still more strikingly to his credit, he undertook, under very critical circumstances, and at the special request of the principal persons concerned, the duty of an important parish in Cambridge, whereby he added greatly to his clerical labours and responsibility ; inasmuch as his congregation, being partly academical and generally more enlightened than that at Harlton, required a different style in the composition of his sermons. Most of these last transactions took place in the course of a year, respecting which he himself records, that he had not a single day's health in it.

The history now advances towards the close of a life which had been long struggling with labours disproportioned to his strength, and was at last seen to sink under the workings of mind too powerful and too active for the mortal part with which it was united. The progress of his disorder was slow, but the steps of it were strongly marked ; and as they present his character in a new light, and afford withal a salutary lesson, although it is confessed of very limited application, against the danger of excess, even in laudable pursuits, some of the most remarkable will be thought worthy of notice. At no time since his return from his last journey to the continent, could

his health be considered as well established ; even at Trumpington, a situation in all respects favourable to it, he had several severe attacks in the stomach and bowels, which were renewed at shorter intervals after his return to Cambridge, where his habits became more sedentary, and his studies more unremitting and severe. Besides many other occasional derangements of his system, there was scarcely a single year in which the exertions and confinement attending his Lectures did not bring on some serious illness, frequently accompanying, but generally following them ; and when these were over, instead of relaxation and repose, he often found such long arrears of composition or correction for his Travels as required the strongest application to recover. At these moments when compelled to continue his labours in a state of weakness and exhaustion, he would sometimes complain to his friends that the burden of them was too heavy for him ; but the general tendency and principle of his mind was to contend with them and to overcome them ; and so far was he from declining his accustomed duties, as his strength decreased, that to the very last, he was always ready to undertake any new one, which either a sense of duty imposed, or even his own good nature brought upon him. "I believe," says he, in a letter to Dr. D'Oyly, in 1816, "I *senectute*, for I knock up sometimes with my duty at Harlton. Yet I have lived to know that the great secret of human happiness is this ; never suffer your energies to stagnate. The old adage of 'too many irons in the fire,' conveys an abominable lie. You cannot have too many ; poker, tongs, and all—keep them all going." Nor was it in truth so much the number and variety of his employments that broke down his health, as the extreme and intense anxiety with which some of them, particularly the philosophical, were pursued by him ; an anxiety which intruded upon his hours of rest, and rendered him insensible to those corporeal warnings which usually guard other men against too continued or too intense an employment of their faculties.

In 1816, the year following that of the Cambridge fever, he writes to a friend that he was laid up exactly as he was the year before, in consequence of his Lectures ; but adds, with his usual spirit, "I trust, however, the vessel will still float, especially as it has been lately so buoyant, for I never had so good an audience, and never enjoyed the thing so much myself." In 1818, he had a sudden and severe attack of illness in returning from his church at Harlton, which he thus describes :—

"You left me going on in a fair way to drop off the perch at last ; and so, very effectually, I did. What with public lec-

tures in the day time, proof sheets day and night afterward, long sittings, and long fastings, as I was returning from Harlton, last Sunday, after rather more than usual duty, but, as I thought, in good health, I was seized in the middle of my ride home, and in the midst of a storm, with faintness and excessive langour, and unable to remain on horseback. Dickes, of Jesus College, overtook me, and conveyed me into a house by the road-side, whence I was removed in a chaise : and I have been ill during all the last week. I am now a little better, but very weak, and muster all my strength to write this long letter to you."*

The next year he found himself so weakened and exhausted about the close of his Lectures, that he went to town to consult Dr. Bailey, from whose prescriptions he does not seem to have derived much benefit. In 1820, besides his usual chronic complaints, he was attacked again with a low fever, which confined him to his house, and for several days to his bed ; his medical attendants, as well now as afterward, differing exceedingly from each other as to the nature of his complaints. Nevertheless, he took all their medicines in turn, besides many other specifics recommended by his friends, while he rejected with a strange perversity, the only remedy in which they all agreed, viz. relaxation from his philosophical pursuits, and cheerful and moderate exercise. Such, however, was the force with which he rallied from these attacks, and such the courage and even cheerfulness with which he bore himself under them, that no serious apprehensions of immediate danger were entertained by his friends or medical advisers, who could scarcely bring themselves to believe that a spirit capable of such continued and increasing exertions, and abounding in such playful and amusing sallies, was actually hastening towards its earthly term ; and as a proof of this general persuasion, it may be mentioned, that so late as the summer of

* This letter was addressed to a young officer, a near relation of Dr. Clarke (Lieutenant Chappel of the Navy,) in whose welfare he always took the greatest interest. This gentleman was an author himself, having written an account of two voyages to the north, in which he was employed : and the remainder of the letter is so full of good sense, that a part of it has been here subjoined :

"There are two or three points to which you should look in all your future compositions. Avoid a redundancy of epithets—they rarely do any service ; and where there is ambiguity, they are always at the bottom of it. Again, in your Voyage to Newfoundland, you use sometimes what is called *sine* words, instead of manly diction ; you talk of *profundity* instead of *depth*—of *altitude* instead of *height*—than which, nothing can tend more to lower our estimation of a writer's taste or genius.—It is making a reader sick with the vulgar *sweets* of novels and newspaper puff, written by the misses and governesses of the 'Boarding schools for young ladies upon a genteel plan.' To confess the truth to you, it is what I have been endeavouring to unlearn, ever since I became an author ; for although uneducated at these 'boarding-schools,' yet I was made to imbibe something of this at a very early period of life."

1821, an ensurance was effected on his life. In that year indeed he had gone through his Lectures with more than usual ease, and finished them, as he records in his journal, in good health. Not long after their close, however, new and more formidable symptoms began to appear ; violent and continued headaches, deafness, dizziness, weakness of sight, and to crown this afflicting list, a polypus in his nose. For this, the most pressing of his complaints, he went to town on the 16th of August, and immediately and cheerfully submitted to an operation by Sir Astley Cooper, from which he returned with fresh spirits and a sensation of general relief ; but scarcely had he time to breathe from this operation, before his family was visited with a calamity which absorbed every feeling for himself, and caused what his own sufferings never did, a suspension of all his literary pursuits. His wife, far advanced in pregnancy, and three of his younger children, sickened one by one with a Typhus fever ; and in a few days were all reduced by the violence of the disorder to a state of the most imminent danger. What he felt during this period, and what he went through, can only be judged of by those who were acquainted with the general tenderness of his nature, as well as with his passionate affection for his wife ; but it may be affirmed with truth, that there never was a moment of his life in which his conduct appears to so great an advantage under so many points of view. It would be difficult to find any where a more affecting picture of conjugal and parental tenderness—of self devotion for the sake of others*—of firmness, watchfulness, and solicitude, than the letters written by him to his friends under these afflicting circumstances disclose.

During the period of the greatest danger, he was constantly employed night and day in going from one bed to another, supplying the wants of the patients, studying the appearances of the disorder, and watching the alterations that took place ; and once, when the servants all broke in upon him in a body at the dead of night, and told him to send for some friend as one of the children was certainly dying, and another nearly in the same state, so far from sinking under the shock of this intelligence, he had the presence of mind to calm their fears, and to inspire them with better hopes. In all this, however, he may be thought to have only followed the natural bent of his benevolence, strongly excited by the danger of persons so dear to him ; but the document upon which the attention of his biographer has been chiefly fixed, as indicative of higher virtues, is

* See Appendix.

a small pocket-book, kept for his own use, in which are noted down from time to time the changes of the disorder, and his own thoughts arising out of them ; thoughts which, however various or powerful the passions that gave them birth, always terminated in devotion : the moment of extreme peril for Mrs. Clarke is recorded with an earnest prayer to the Father of all Mercies for better times : the account of her convalescence is closed with a heart-felt praise—God be thanked, the Author of all good gifts. Such are the trying circumstances in which true piety is manifested ; and these silent breathings of his soul in communion only with his Maker, will be remembered with comfort by his friends, when all that delighted in his conversation, or informed in his writings, will be regarded with comparative indifference.

Mrs. Clarke was seized with the fever on the 21st of September, and was declared convalescent in the middle of October ; but as another severe trial awaited her, his anxiety for her was not removed till the 1st of December, when, almost beyond his hopes, having been safely delivered of an infant in perfect health, every fear for her well-doing was removed. It was then, and not till then, that he resumed his occupations with his accustomed ardour, pressing forward with the last volume of his Travels, and entering upon a course of experiments with the ores which produce Cadmium : and although the symptoms of his disorder had now returned upon him, aggravated extremely by the fatigue and anxiety he had lately undergone, they seemed neither to have depressed his spirits, nor to have damped the ardour of his pursuits ; of which the following trait will be considered as a proof. In the course of the summer, his relation, the Rev. Mr. Newling, had frequently directed his attention to a collection of minerals, in the neighbourhood of Litchfield, advertised for sale in December, in which, among other valuable specimens, was a piece of rock crystal enclosing a drop of moveable water. For this Dr. Clarke became the successful bidder at the sale through his friend, and having learned afterward that a young lady had been his competitor, whose disappointment was said to have cost her a tear, he wrote some verses to console her, and desired his cousin to lay them at her feet, with the intimation, which he hoped would be his excuse, that the specimen was intended for his Lectures. To show the spirit of the man at such a moment, as well for the sake of the pious thought contained in them, it has been thought right to insert them here.

Fair lady, on thy tender cheek,
No tear for this may shine ;
This tear will often softly speak
Thy Maker's praise and thine !

Here, first within its crystal fount,
 The dew of Heaven appears ;
 Such dew as erst from Hermon's mount
 On Sion fell in tears

This limpid drop a sacred theme
 Still as it moves ordains,
 And speaks the hand of power supreme
 That omnipresent reigns.

From the end of this month, however, the sense of his disorder seems to have been more painful, and the progress of it more rapid. Writing to a friend, he says,

"The deafness, noise in my ears, and giddiness, has so much increased, that I have applied twenty-four leeches to the back of my neck. What makes me write to you is, to ask why you were cupped? Was it not for a similar complaint? Yesterday I should have fallen down if I had not caught hold of one of the cabinets in my Lecture-room; a sound like distant cannon rushed into my ears, attended with dimness of sight, and extreme giddiness. I believe it is all from the stomach—but it was increased tenfold by the late illness of all my family. Thank God! they are all well."

These distressing symptoms were soon after followed by a sort of crisis in the disorder, during which he was more thoroughly sensible of the perilous state of his own health, than at any other period either before or after. For the first time of his life he entertained thoughts of suspending for a while the duties of his church, and of giving up his Lectures for the next year; and to Mrs. Clarke he stated with great tenderness, his apprehension that he should not recover; expressing, however, no fear of death on his own account, which he considered as the Christian's rest, but lamenting the probable desolation of herself and her children when left alone to struggle in the world; while to his brother, whom he saw at Windsor in January, when he took his boys to school at Eton, he expressed more decidedly his conviction, in his own emphatic way, that he was sent for.

A short and deceitful interval of ease followed, in which the intermitting of the disorder gave him reason to hope that he was slowly recovering; and under this impression he entered once more, in the middle of the month, upon a course of chemical experiments, preparatory to his Lectures, which were to begin in March: but from the moment he had stepped within the circle of these fascinating operations, there was no longer either thought or power of retreating; for the usual excitement attending this preparation, co-operating with the effects of the disorder, which ultimately terminated in an affec-

tion of the brain, brought on a course of unnatural efforts, infinitely exceeding all his former imprudences, and partaking strongly of the delirium which quickly followed.

"I have left him in an evening," says a friend, "about this time, with a promise that he would go to bed, and on the following morning have found that he had been up a considerable part of the night, engaged in a series of unwholesome operations with sulphuretted hydrogen." In this melancholy state of self-abandonment, deaf to the remonstrances of his friends, insensible of his own danger, almost incapable of self-control,* and intent only upon the due performance of his approaching duties, he supported an ineffectual struggle with his disorder till the middle of Feb. when his strength entirely failing him, and being no longer able to stand up, he sank reluctantly into his bed, and from thence dictated to his servant the course of operations he wished to pursue, and there received from him the results. Up to this time, however, the arrangements of his mind seem to have been vivid and distinct as far as philosophy was concerned, and its energies unabated. His last paper, in Dr. Thomson's *Annals*, is dated the sixth of February, and contains a clear statement of a complicate operation in chemistry, for obtaining Cadmium from sheet zinc. On Tuesday the 12th, he wrote from his bed upon the same subject to Mr. Lunn; and on Thursday the 20th, another letter to Dr. Wollaston, reporting his last operation. On Friday the 21st, Mr. Lunn saw him, when he was quite rational upon this subject, as far as he was permitted to speak, though sick and in bed: On Saturday he was carried to town for advice, by Sir William and Lady Rush, where he was attended by Sir Astley Cooper, Dr. Bailey, and Dr. Scudamore. But their efforts to save him were in vain; the rest of his life, about a fortnight, over which a veil will soon be drawn, was like a feverish dream after a day of strong excitement, when the same ideas chase each other through the mind in a perpetual round, and baffle every attempt

* The letter which follows, written a few days before his removal to town, will convey some notion of the state in which he was at this critical period. It was addressed to the Rev. Mr. Lunn, who frequently assisted him at this time in his operations, and to whom the author of this Memoir is indebted for much valuable information respecting the pursuits and productions of his latter years:—

"After being up all night, and taking more care than I ever did before, I lost every atom of the Cadmium, owing to too great heat in the last evaporation. It came away in orange-coloured fumes, very pretty, but very alarming to me. I must be troublesome to you to beg for all my zinc back again, except as much as will enable you to say if lead be present. I am going to work on five hundred more grains in my Lecture-room. But never collect the sulphuret on a filter. It sticks to it as my illness does to me; and by boiling the filter in muriatic acid, this acid was contaminated with sulphuric acid, though I washed it repeatedly. I expect not to find more than one per cent. of Cadmium.

"E. D. C."

to banish them. Nothing seemed to occupy his attention, but the syllabus of his Lectures, and the details of the operations, which he had just finished; nor could there exist to his friends a stronger proof that all control over his mind was gone, than the ascendancy of such thoughts, at a season when the devotion so natural to him, and of late so strikingly exhibited under circumstances far less trying, would, in a sounder state, have been the prime, if not the only mover of his soul. One lucid interval there was, in which, to judge from the subject and the manner of his conversation, he had the command of his thoughts as well as a sense of his danger; for in the presence of Lieutenant Chappel and Mr. Cripps, he pronounced a very pathetic eulogium upon Mrs. Clarke, and recommended her earnestly to the care of those about him; but when the current of his thoughts seemed running fast towards those pious contemplations in which they would naturally have rested, his mind suddenly relapsed into the power of its former occupants, from which it never more was free. At times indeed gleams of his former kindness and intelligence would mingle with the wildness of his delirium in a manner the most striking and affecting; and then even his incoherences, to use his own thought respecting another person, who had finished his race shortly before him, were as the wreck of some beautiful decayed structure, when all its goodly ornaments and stately pillars fall in promiscuous ruin. He died on Saturday, the 9th of March and was buried in Jesus College Chapel, on the 18th of the same month.

He left seven children, five sons and two daughters; the eldest son not fifteen years of age at the time of his death.

Few persons have left the world more honoured or more regretted. The tears of genius have been shed around his tomb, and every mark with which respect or kindness can honour departed merit is preparing to grace his memory.

A monument, erected in Jesus College Chapel, near his grave, at the expense of his fellow collegians, will serve to stimulate the youth of that society in the paths of enterprise and science: a bust, executed by Chantrey, at the cost of his literary friends, principally members of the Philosophical Society, at Cambridge, will perpetuate the honour of one of its most distinguished ornaments and founders: while his collection of minerals,* fixed by the liberal suffrages of the University within its precincts, will remain an appropriate memorial of the respect

* His collection of mineralogy was valued by Mr. Howland at 1100*l*. but the University voted for the purchase of it, 1500*l*.

paid by that body to their first mineralogical professor. But the best proof of the many excellent qualities of his heart, is the sincere and ready kindness shown towards his family since his death—kindness not less honourable to human nature, than to the individual for whose sake it has been exerted—derived not from the wealthy or the great, by whom it would be lightly felt, but from persons of his own rank and means, and involving sacrifices which nothing but friendship and affection could warrant.

His character will be best gathered from his writings and his life, and to them perhaps it would be wiser to intrust it, but the friend who has paid this tribute to his memory, cannot quit his task without endeavouring to bring together some features of a portrait, which ought to represent, one of the most amiable and the most intellectual of men.

The two most remarkable qualities of his mind were enthusiasm and benevolence, remarkable not more for the degree in which they were possessed by him, than for the happy combinations in which they entered into the whole course and tenor of his life; modifying and forming a character, in which the most eager pursuit of science was softened by social and moral views, and an extensive exercise of all the charities of our nature was animated with a spirit which gave them a higher value in the minds of all with whom he had relation or communion.

His ardour for knowledge, not unaptly called by his old tutor, literary heroism, was one of the most zealous, the most sustained, the most enduring principles of action, that ever animated a human breast; a principle which strengthened with his increasing years, and carried him at last to an extent and variety of knowledge infinitely exceeding the promise of his youth, and apparently disproportioned to the means with which he was endowed; for though his memory was admirable, his attention always ardent and awake, and his perceptions quick and vivid, the grasp of his mind was not greater, than that of other intelligent men; and in closeness and acuteness of reasoning, he had certainly no advantage, while his devious and analytic method of acquiring knowledge, involving as it did in some of the steps all the pain of a discovery, was a real impediment in his way, which required much patient labour to overcome. But the unwearied energy of this passion bore down every obstacle and supplied every defect; and thus it was, that always pressing forward without losing an atom of the ground he had gained, profiting by his own errors as much as by the lights of other men, his maturer advances in knowledge often extorted respect from the very persons who had regarded his early efforts with a sentiment approaching to ridicule. Allied to this was

his generous love of genius, with his quick perception of it in other men ; qualities which, united with his good nature, exempted him from those envyings and jealousies which it is the tendency of literary ambition to inspire, and rendered him no less disposed to honour the successful efforts of the competitors who had got before him in the race, than prompt to encourage those whom accident or want of opportunity had left behind. But the most pleasing exercise of these qualities was to be observed in his intercourse with modest and intelligent young men ; none of whom ever lived much in his society without being improved and delighted—improved by the enlargement or elevation of their views, and delighted with having some useful or honourable pursuit suitable to their talents pointed out to them, or some portion of his own enthusiasm imparted to their minds.

As a parish priest, in which capacity his character has not been touched upon, he was kind, charitable, and attentive ; not contenting himself with his prescribed duties on a Sunday, but visiting his flock frequently in the week as occasion required, and otherwise employing himself in devising means for their spiritual welfare and improvement. Among these may be mentioned a Sunday school, which he established and conducted himself with unusual attention and success, catechizing the children from the reading-desk, and making them repeat their lessons in the presence of the congregation, whom he thus contrived to interest in their progress. Nor can his friends easily forget the delight with which he was accustomed to carry over to Harlton, caps, bonnets, ribands, &c. prepared by Mrs. Clarke, as rewards for the most deserving of the children. It is almost needless to add, that as a preacher he was popular and eminent ; for endowed as he was with so many requisites for eloquence, and capable of animating the tamest and most ordinary subjects, it would have been strange indeed if he could have been anything but powerful and energetic when engaged in topics involving the deepest interests of humanity, and inspired by a book, which, independent of its doctrines and precepts, was always regarded by him with the utmost admiration and reverence. But it is pleasing to record upon the most unquestionable testimony, that the effect of his discourses from the pulpit was even more striking and persuasive than his fine qualities might have given reason to expect. The crowded audiences, both of young and old, which always attended him at St. Mary's, afford the best proof of the estimation in which he was held by the University ; and the subjoined letter from a prelate with whom he was intimate, relating to a sermon delivered in his parish church of All Saints, in 1820, will furnish an interesting

specimen of the effect produced by him in the discharge of his more ordinary duty.* His sermons which remain, exhibit great eloquence and pathos, and some of them may probably hereafter be given to the public.

Of that happy combination of qualities and endowments for which he was so distinguished and admired in general society, enough perhaps has been already said, although it would be difficult to do justice to such a theme. It may be added, however, that though he often gave the tone to the conversation, he was more disposed to bring forward the opinions of other men than to take the lead in it himself, and the genuine delight with which he hailed a bright or good thought from others, was one source of the pleasure which he gave.

In the bosom of his own family, and in the intercourse of intimate friendship, he was more kind, engaging, and affectionate, than can be well conceived by those who did not know him. It was here that the warmth of his heart, and the cheerfulness of his spirit appeared to most advantage, and though the slightest acquaintance was enough to excite an interest in his behalf, yet the nearer he was approached and the more intimately he was known, the more delightful did he appear. His tête-à-tête conversation with a friend was a perpetual flow of humour, kindness, and intelligence, in which every fold of his heart was laid open, and the confidence and even energies he felt were almost certain to be inspired. It was quite impossible for an intelligent man whom he regarded to be dull in his society, or to have occasion to inquire within himself what he was to say. In fine, all who were closely connected with him must feel that with him one great charm of their existence is gone. In public life his loss will be long and severely felt; but in private it is irreparable. In the walks of science his place may be supplied; another traveller equally patriotic and enlightened, may like him enrich his country with the spoils of other ages, and of other climes; and his mantle may be caught by some gifted academic, who will perhaps remind his audience of the genius and eloquence they have lost; but the void occasioned

* "I have read your sermon which I now return with a thousand thanks. It is, positively, one of the most affecting and eloquent, and at the same time, well connected and well arranged compositions I ever read. Such appeals, and so delivered as this was and all are that come from you, must have sent away many a heart, torn for what had passed, anxious to make amends, if amends were in their power, and excruciated if the opportunity of amended conduct were removed from them for ever. You are, yourself, scarcely aware of the effect produced by such powerful addresses to the human heart.

"May God long keep you to your family, and to those who have the fortunate opportunity of hearing such words of Christian instruction.

"Ever most faithfully yours."

by his death in the breasts of his family and friends can never be filled up.

The following lines, which are a tribute of affection to Dr. Clarke from the pen of Professor Smyth, touch with so much truth and feeling upon the most memorable points of his life and character, that they can no where find a more appropriate place than in the close of a work dedicated to his memory.

Far o'er each tract renown'd, each distant land,
From Lapland's snows to Egypt's burning sand
The traveller pass'd—and willing Fame had now
Placed her bright wreath upon his honoured brow;
Granta's calm bowers had round him seemed to close,
And happy Love had sooth'd him to repose.

'Twas then that science to his ardent view
Unveil'd her opening worlds of promise new.
—Alas for man! the being of an hour!
Frail heir of endless hope, but bounded power!
Worn, faint, beneath the still aspiring aim,
Exhausted, lifeless sunk th' unequal frame.

How vainly now may fall affection's tears,
How vain the bust which public homage rears,
While Friendship, with resistless grief inspired,
Sighs o'er the arbour which it once admired,
And mourns the genius, that with fatal sway
Had "o'er informed the tenement of clay."

Yet tho' on earth benighted and confined,
Not vain the towering hope, th' unwearied mind—
The dead shall live, another and the same,
The sage's fire shall be the seraph's flame;
The veil shall part, and o'er the dark unknown
Be pour'd th' effulgence of the living throne.

APPENDIX.

No. I.

*Critique on the Character and Writings of Sir George Wheler, Knt.
as a Traveller; in a Letter to the Rev. F. Wrangham.*

MY DEAR WRANGHAM,

THE news that you are about to publish a Memoir of *Sir George Wheler*, by so eminent a scholar as *Dr. Zouch*, is as gratifying to me and to all your friends in this University as it will be to the literary world in general. There is not perhaps any part of *English biography* so destitute of information as that which relates to this accomplished, amiable, and I will add, illustrious traveller. Very little more at present is known concerning him, than what we gather from the narrative of his '*Journey into Greece*,' published after his return, first by his companion *Dr. Spon*, of *Lyons*, and subsequently by himself. You ask me to state my opinion of his merits as a traveller, and the character which I had formed of his writings, from my own personal observations, after comparing his descriptions with the places and many of the objects referred to upon the spot. I shall do this with the greatest willingness, because, during my travels in *Greece*, I had *Wheler's* book often in my hands: and I regret very much that, when I visited *Jerusalem*, I was not provided with the curious little tract upon the "*Primitive Churches*" published by him after he became Prebendary of *Durham*; a work* now become rare, but admirably calculated for aiding the researches of travellers, who may wish to compare the present appearance of the Church of the *Holy Sepulchre* with the account given by *Eusebius*† of the original structure.

Respecting the merits of *Wheler*, as a traveller, there can be but one opinion among those who have had an opportunity of judging. That he was diligent in his researches, intelligent, faithful, a good naturalist, and a zealous antiquary, cannot be disputed. That he was profoundly learned, will perhaps not be so readily admitted. It may be said, that for the erudition displayed in his book of travels, he was mainly indebted to his companion *Spon*; a charge easily urged, and after all not so easy to be proved. *Wheler* confesses,

* '*An Account of the Churches or places of Assembly of the Primitive Christians, &c. by Sir George Wheler*,' Lond. 1689.

† *De Vita Constant. Lib. 3.*

that he copied into his work some passages as he found them already published by his fellow-traveller :* but the facts, to which those passages relate, may have existed previously in his own Journal; and, with regard to the erudition by which they are accompanied, the later writings of *Wheler* sufficiently prove that his literary attainments enabled him to supply every illustration of this nature.

The characteristics of the man, as gathered from the view of him afforded by his writings, seem to have been mildness and piety. That ardent love of his country, which in almost every *English* traveller is increased by the privations sustained in foreign territories, and especially when he beholds the state of oppression and degradation into which the inhabitants of the *East* have fallen, is remarkably conspicuous in *Wheler*. Upon his return to his native land, he breaks forth in exclamations of gratitude to the Supreme Being,† “who had placed the lot of his inheritance in a land that he had blessed and hedged about for himself; where nothing is wanting to supply the defects of frail nature; where every man’s right, from the prince to the peasant, is secured to him by the protection of good and wholesome laws.” To feel the truth of this in its full force, and to be made duly aware of the advantages possessed by *Great Britain* over every other nation upon earth, it is only necessary to know what the condition of society is in other countries, and how their governments are administered. Alluding to his own pious habits of reflection “upon the various events of things, and the phenomena of nature,” and foreseeing that there were some to whom this serious turn of mind would not be pleasing, he says; ‡ “As to men of this irreligious temper, I make no other answer, but that I designed to write as a Christian traveller and philosopher; and if my book be unacceptable to them, because it savours of my religion, they may leave it (as they do their Bibles) to others, who will like it better upon that account.” What the effect was of such habits upon a temper naturally amiable, appears in the account which he has given of his state of mind, after being deserted by his companion *Spon*, the day of their separation at *Turco-Chorio*. I remember being much struck with the passage, having had the satisfaction of reading it upon the very spot where they parted:— “Thursday, the ninth of March,§ being separated from my companion, I left *Turco-Chorio*, bending my course eastward to go to *Thessalonica*. The first thing that diverted me in that solitary condition was, that I soon found myself on a long straight way, fortified with a deep ditch on each side, leading to certain hills which I saw a good way off before me. This I took as a good omen, portending

* “What I find Monsieur *Spon* hath omitted, I have supplied; and on the other side, what material things I found I had neglected in my own Journal, I added out of his book, if I well remembered them. When I met with any things to be mistakes, I have as freely corrected them, and in dubious criticisms I have given my own opinion and reason.”—*Journey into Greece, Preface*, p. 3. Lond. 1682.

† *Journey into Greece*, p. 482. Lond. 1682.

‡ *Journey into Greece*, p. 463. Lond. 1682.

§ *ib.* Pref. p. 3.

success to my undertakings : it seemed to admonish me, that I should not fail to be guarded by God's good Providence, so long as I travelled in the straight way of virtue and true piety to my heavenly country, which is on high." Some of *Wheler's* discoveries in Greece, although nearly a century and a half has elapsed since they were made, have not even yet been duly regarded. One of the most remarkable, as illustrating the ancient history of that country, was his finding the splendid remains of the *Isthmian town*, where the *ISTHMA* were celebrated : I own not noticed by *Mentelle* in the work which he subsequently composed for the French *Encyclopedie*,* nor mentioned (as far as I am informed) by any writer upon ancient Geography. Modern authors indeed, with the exception of *Wheler*, seem not to have been aware that any such town existed ; and after the description which he has given of the place, and the remarkable inscription which he found upon the spot and published in his Travels,† such has been the oversight or neglect of the travellers who have followed him, that we have no account of any one of them having visited those ruins. *Chandler* even ventured to assert, that "neither the *Theatro* nor the *Stadium* were visible."‡ I arrived upon the spot in 1801, and found every thing that *Wheler* had said fully confirmed, in a view of the place. The *Theatre* remained facing the Port *Schoenus* ; together with the *Stadium*, and the ruins of the Temple of *Neptune*, upon an area two hundred and seventy-six paces in length and sixty-four in breadth. Many other reliques of the most magnificent buildings were also scattered about in promiscuous disorder. Among these ruins, the peasants of the neighbouring villages of *Hexamillia* discover ancient medals of almost all the States of Greece ; nor is there perhaps any spot in the whole of that country, which would better answer the purposes of making excavations in search of antiquities. Since my return to England, I have constantly endeavoured to direct the attention of travellers towards those ruins ; but even the site of them is not yet laid down in any other map than in the diminutive sketch prefixed, as a vignette, to the chapter of my Travels in which those ruins are described.§ A topographical chart of the whole *Isthmian* territory is much wanted, in order that the situation of the town where the *ISTHMA* were celebrated, and its relative position with regard to *Corinth* and the other cities of *Peloponnesus* and *Achaia*, may be assigned for the ancient geography of Greece.

Other obligations due to *Wheler* are better known. The valuable additions made to *Natural History*, by the number of rare plants described in his Travels, need not be enumerated ; because there

* *Encyclopedie Methodique, Geographie Ancienne, par M. Mentelle, &c.* 3. vols. 4to. Paris, 1792.

† *Chandler* says the marble has been removed, and is now preserved in the Museum at Verona. The inscription begins Θωας Παρσιδς και τη Παρσιδς, κ. τ. λ.—(See *Wheler's Journey into Greece, &c.* p. 438. Lond. 1682.)

‡ Travels into Greece, p. 245. Oxford, 1776.

§ See III. 18. p. 741. 4to edit. Lond. 1814.

is hardly any work of general *Botany*, in which his name and discoveries are not commemorated. His *Geographical* observations were highly valuable in the time when they were made. Before the appearance of his work, there was not a *map of Attica* upon which the smallest reliance for accuracy could be placed. He was the first traveller in *Greece*, who adopted the practice of taking a mariner's needle to the tops of mountains for the purpose of making observations of the relative positions of places, and thereby reducing those positions into triangles. "Although," said he,* "this be but an ordinary rule in surveying, yet in those countries where from a mountain one may see, twenty, thirty, forty, and fifty miles about, it may prove of more use and certainty than all the rest of the geographical art of longitudes in the world."

The style of his narrative possesses the quaintness characteristic of authors, who wrote English prose in the seventeenth century, and sometimes to a degree that reminds us of his predecessor *George Sandys*; as, for example, when in describing the *Cameleon* he says,† "One that I opened had guts."

The "*Sculptures*," as he terms the Copperplates, introduced into the text of the different pages of his narrative are wretched performances, seldom bearing any resemblance to the things they were intended to represent; with the exception only of the plants and medals which he has figured, and these are better done, considering the time when they were engraven. But as it is not my intention to point out the defects of his work, I shall pursue this subject no farther; being actuated only by a desire of rendering a just tribute of acknowledgment to a traveller, who at so early a period offering an example to his countrymen, voluntarily engaged in an enterprise of fatigue and danger, "CUPIDINE VETERES LOCOS ET FAMA CELEBRATOS NOSCENDI."

I remain, my dear Wrangham, &c. &c.

EDWARD DANIEL CLARKE

Cambridge, June 11, 1819.

No. II.

Dr. Clarke was no politician; but he was a great admirer of Eloquence in every department of it; and we regret that this letter, which, it is remembered, closed with an animated and singular representation of Mr. Pitt's speech, should be now a fragment.

* Journey into Greece, &c. Pref. p. 3. Lond. 1682.

† Journey into Greece, p. 249.

“ *Committee Clerk's Office, House of Commons,
One o'Clock, P. M. 1803.* ”

“ *Dear Otter,*—How I must economize this paper! The physicians and my friends all pronounce me mad! I jumped out of my sick-bed this morning, determined to be present at the most important debate this country ever knew; and came pale and panting to the House of Commons. Never was there such a sight. I was here so early as eleven; but from eight o'clock people have been waiting, and will wait, standing on the cold pavement, till five; for the gallery is not to be opened till after prayers, and constables guard all the avenues. You have no idea of the mob, among which are many people of distinction, already hungry and tired, standing with a scrap of a pamphlet, or reading over and over advertisements in the papers. I'll answer for it, they will not get away before to-morrow's sunrise. How is it then, I sit here at my ease; for such waiting and squeezing would have killed me. — is gone to Epsom. I sent the boy in; but went alone to E. Stracey, in Fludyer-street, who brought me, snug, to sit grinning in his office, which opens into the Lobby of the House of Commons; so, the moment the Speaker comes, I shall *demande la parole* of the door-keeper, and strut in with the Members, as *shaky* and *diaphanous* as a jelly, and fit to pass for a specimen of *crystallized Quinsey*. In the mean time, of Stracey's office window, I have begged this large piece of paper of one of the clerks, and folded it in true *official* mode, that you may be epistolized.

“ Considering the debate that will ensue to-night, as the most extraordinary in all its consequences and characters, that the history of the Nation of Europe will ever record, I shall send you the paper that gives the respective speeches with the greatest fidelity. I never was prepared for higher interest, in any discussion, public or private. The events within the few last weeks have been all astonishing, unaccountable: things that could not be foreseen; and we are now to hear the greatest orators the world ever did, or perhaps ever will know, decide whether Britain or France is to hold the first rank among the nations. The ears of all Europe are open, wide, expanded; eagerly waiting to hear what will be said this night. Perhaps the event may be looked to; but it is a discussion so singular; so open to the display of talents, of patriotism, of intrigue, of masterly policy, of all the passions, and all the arts, and hypocrisies, and contrivances, and ambition, and genius of man. Who would not be present on this night, even if he lived not to reach another? I know well what is thought of England on the Continent; how, in the midst of all their pretended ridicule and contempt of John Bull, is couched terror, and respect, and watchfulness; and how eagerly they wait for news of what passes in the minds of Englishmen and the decisions of our senate. Now then, all awake and gaping, and wondering, how will they look to the result of this night! It is no longer Bonaparte, but John Bull, who is to give peace or war to Europe. Bonaparte, who in a few short

months has let himself down in the broad parachute of public opinion, from a height greater than any human being ever attained before. Who shows that he is not only mere man, like other men, but not to look any longer at the black walls and smoky tiles out a *little, little, little*, man ; once the *wonder*, now the sport even of fools. When seen at a distance, an awful countenance—when examined near, a brick."

" Tuesday morning.

" In the middle of this analysis of Bonaparte, came in E. Stracey, to tell me, a Member would conduct me through the House to the Committee-room. By this means I had the choice of a seat in the gallery, and sat in front during the debates. But when the mob broke in, such a scene ensued as was never beheld in the House of Commons before. I find all the reporters of the Papers were thrown out, and you will see in the Morning Post the history of the Committee scheme. I have been to the editor, and offered to give him Pitt's speech, but he says the proprietors of all the Papers are determined to give the debates no more if the order is not taken off. The debate is not yet over ; it is postponed to this night. I staid till the middle of Gray's speech, and came away. The impression made on me by Pitt's amazing eloquence made all the rest appear stuff and nonsense.

" The Debates were opened by Jekyll's asking ministers for more official papers, and Lord Hawkesbury assured him there were none. Then Lord Hawkesbury began to explain the conduct of Ministers since the Treaty of America, in a long speech. He was followed by Mr. Erskine in a speech which kept the House in laughter. Then rose Pitt. I have heard him upon almost all the great occasions in which he has shone, but never was his eloquence so powerful. At first, out of his usual way, he was full of fun, and ridiculed Erskine and Bonaparte with wonderful effect ; then in a most solemn but beautiful address to the passions, he called upon the House for their——"

No. III.

The Author has noticed in more than one place of these memoirs, the eagerness with which Dr. Clarke always hastened to direct his philosophical discoveries, whether more or less important, to some private or public benefit : and the following letter will show that he was still, in this predominant feature of his character, the same person who, when a child, so anxiously brought from Surrey to the old women at Uckfield, specimens of prepared reeds to save their candles.

"August 10, 1813.

"*My dear Cripps*.—A letter from Tennant came in your parcel. Have you seen him? A *hint*, that he gave me, as to the constituents of the *instantaneous lights*, has enabled me not only to make out the whole process; but also to discover a great improvement in making them; and the first use I design for my chemical conjuring box is to send it to you, to stand during summer on your writing table, that when you want a light, to seal a letter, your old companion may excite it for you, and make you sometimes *remember him*."

"August 22, 1813.

"I send you with this a specimen of the further improvement I have made in the *Promethean* matches; and I think they will surprise you. Get your little bottle entirely cleaned out, and make the apothecary drop in enough sulphuric acid just to reach with a match, like ink at the bottom of a wedgewood inkstand; dip one of these matches in—take out the match quickly; because too much acid puts out the fire. On this account the London people use bottles containing a sop of Asbestos, acting like a sponge; but I have found out *their entire secret*. Mr. Watson, chemist, of Cambridge, has applied to me to give the *recipe* to him; but I have given it to my man Johnson; who supplies all the shops in Cambridge with matches at half the London price. You will find mine to be better than those made in London. And the acid which your bottle will contain will last good for four hundred matches before you need alter it, and then a drop of the acid is all that will be required; only take out all the pounded glass, as of no use."

"Trumpington, Sept. 7, 1813.

"I have now brought my matches to perfection; and far beyond the London manufacture; as you will see by the enclosed. Johnson will make a *little fortune* by them. He sells them by thousands; and it will help him to pay for his wife's confinement and furniture. With 2s. 6d. of materials he makes as many matches as he sells for eight shillings; and he literally earns during his leisure hours at the rate of five guineas a week. He is beginning now to send them to London. All this came of a few words let fall by Tennant; although Tennant does not know how they are made. I discovered the secret; and if you will come here, I will not only teach you how to make them, but set you to work in good earnest; and it is a most amusing job.

"Please to observe, as to your bottle: it must be cleaned out now and then; and when made quite dry by thrusting in a point of blotting paper, drop in some fresh sulphuric acid; taking care always that the fluid *never rises above the bottom of the fountain*."

"To prevent awkwardness I have made it almost impossible for any one to fill the bottle higher than *a. b.* Yet some ingenious ama-

teurs were trying the other day to force the acid up to *c. d.*; the consequence of which almost always is, that a drop of sulphuric acid, as black as your hat, falls from the point of the match in burning.

"You see it falling! take care it does not drop upon Charlotte's petticoat, or your pantaloons! It is always best to hold the ignited match over a small saucer. The London people make use of Asbestos to prevent this. If you can get a little very fine *cotton-like Asbestos*, you may take a small phial, with a glass stopper, and thrust in a *very, very* small quantity *lightly*, so as to lie puffy, and then drop in as much sulphuric acid as it will suck up, without letting any flow about the bottle. Then, my stars! how your matches will kindle!"

"Trumpington, October 21, 1813.

"The birth of my seventh son interrupted the little parcel I have now sent. You will see by it that I have brought my work to great perfection; insomuch that Mr. Watson, the chemist at Cambridge, has entered into a partnership with my servant *for the concern*, as wholesale agents; and supplies all the towns in England with the apparatus. Every article of it is prepared under my roof; and Johnson will earn enough by it to educate his little child.

"The most extraordinary part of it you will find in the bottle; a *newly discovered acid*; which instead of turning black by the action of combustible bodies, like the *sulphuric acid*, actually becomes by use more and more transparent. When you light your matches, it is best only to touch the acid, for the ignition is so very powerful, that if immersed in it, the match will sometimes light in the fountain, and fill your little bottle with smoke. *The printed paper* I have drawn up for Watson; but do not mention the author."

No. IV.

The early passion of Dr. Clarke for Gray's poetry, which has been already noticed, never faded during his whole life; and it was a great delight to him in the latter part of it to think, that the public taste was fast veering round towards his own.—The fragment quoted in the letter which follows, will be found in Mr. Matthias's edition of Gray, which, on account of its great price and size, is unfortunately but little known.

"Cherryhinton, May 15, 1814.

"My dear Otter,—My Lectures are again concluded; for the eighth year. I made my *congé* yesterday; after lecturing for an hour and a half, *stars pede in uno*. As a parting gift, I exploded a

whole battery of *hydrogen*; and then gave them, to their utter astonishment, the description of a descent into the mines, by whom, do you think? aye, by whom? you might guess for a month in vain! By *our poet Gray*, in some unpublished lines, written by him at the age of 22, and which I ventured to improve on a little; but *mum!* as to that; here they are.

‘Through subterraneous passages they went,
Earth’s inmost cells and caves of deep descent;
Onward they pass, where ripening minerals flow,
And embryo *metals* undigested glow;
Where *gems* break through the night with glittering beam,
Or paint the margin of the costly stream,
All *stones* of lustre shoot their vivid ray,
Or mix attempered in a various day:
There the soft *emerald* smiles, of verdant hue;
There *rubies* flame with *sapphire’s* heavenly blue;
The *diamond* there attracts the wondrous sight,
Proud of its thousand dies and luxury of light!’

“I desire you will observe the singularly classical accuracy of ‘There rubies *flame*,’ the ruby being the *antefaz* of Theophrastus. This is always the case with Gray; in every word—in every thought—in *every inch*—(as they say at Cherryhinton)—a scholar and a poet.”

The following letter of Mr. Gray, to Mary Antrobus, is found in a curious collection of autographs, made by Dr. Clarke in the latter part of his life, and is thus noticed by him:

“Gray, whose rising fame, augmenting with every succeeding year of my life, has finally triumphed over false criticism and the envious assaults of his contemporaries.”

The letter itself will not be thought uninteresting. It was written to Mary Antrobus, on the day of his presentation to George III., upon his appointment to the Professorship of Modern History at Cambridge, and contains some traits highly characteristic of the poet.

“29th July, 1768.

“*Dear Mary*,—I thank you for all your intelligence (and the first news I had of poor Brocket’s death was from you,) and to reward you in part for it, I now shall tell you, that this day, as hot as it is, I kissed the King’s hand; that my warrant was signed by him last night; that on Wednesday I received a very honourable letter from the Duke of Grafton, acquainting me, that his Majesty had ordered him to offer me this Professorship; and much more, which does me too much credit by half, for me to mention it: the Duke adds, that *from private as well as public considerations, he takes the warmest part, in approving this measure of the king.* These are his own words. You see there are princes (or ministers,) left in the world, that know how to do things handsomely; for I profess I

never asked for it, nor have I seen his Grace, before or after this event.

"Dr. R. (not forgetting a certain lady of his,) is so good to you and to me, that you may (if you please) show him my letter: he will not be critical as to the style, and I wish you would send it also to Mr. Brown, for I have not time to write to him, by this post: they need not mention this circumstance to others—they may learn it as they can. Adieu.

"I receive your letter of July 28 (while I am writing.) Consult your friends over the way; they are as good as I, and better. All I can say is, the Board have been so often used to the name of Antrobus lately, that I fear they may take your petition not in good part: if you are sure of the kindness or interest of Mr. A., the opportunity should not be lost; but I always a little distrust new friends and new *lawyers*.

"I have found a man, who has brought Mr. Eyres (I think) up to my price in a hurry; however, he defers his final answer till Wednesday next. He shall not have it a shilling lower, I promise; and if he hesitates, I will rise upon him like fury. Good night. I am ever

• "Yours.

"How could you dream that St—, or Hinchl—, would ask this for themselves? The only people that asked it were Lort, Marriet, Delavel, Tibb, and Peck—at least I have heard of no more. Delavel always communicated his thoughts to me, knowing I would make no ill use of that knowledge. Lort is a worthy man, and I wish he could have it, or something as good: the rest are nothing."

No. V.

This part of Dr. Clarke's correspondence relating to his own health, and that of his family, in the last year of his life, was mislaid during the printing of the first edition, and is now subjoined.

"Cambridge, Sunday, Sept. 23, 1821.

"*My dear Otter*,—I feel that you know nothing of what is going on, and, of all men, you ought to be the first informed. You can have no idea of the trials I have gone through lately. As my health grew more and more relaxed, I at last discovered something very high in the left nostril, which totally obstructed my breathing. It turned out to be a polypus, growing from the Laminæ of the pituitary membrane, or rather 'os ethmoides.' I was sent to London to Sir Astley Cooper, to have this polypus extracted; and he cut it out with marvellous skill: but my deafness which was at first

relieved, not by the operation, but by the journey, has returned, and is so increased that you will hardly know your old friend.

"The second act opens with the Cambridge fever in my house, and all my poor children, with leeches upon their temples, like false curls, or, as they are called, KILLEN. My angel of a wife, to save whose life I would lay down ten thousand such worthless lives as mine, having caught the fever from nursing her sick children, is extended upon her bed, in the seventh month of her pregnancy, having had eighteen leeches upon her temples, and forty ounces of blood taken away—twenty from either arm; with her head in a state of distraction. Wanting from ill health, the little strength of mind I have possessed in scenes of danger, I sometimes give way a little; but upon the whole, as you, my dear Otter, will see by this letter, I have *luff'd*, and kept up to the wind; as you always induced me to do by your own example.

"As to other matters, of my own affairs; they dwindle into such trifles, compared with the safety of my blessed wife and children, that I will say nothing of them. I have ensured my life in the *Rock*. There's for you! Give my love to Mrs. —, and to all your family. I hope things will take a better turn—but should they not, his "will be done," who gave me every comfort, and who may take them from me without one murmur on my part.

"Your sincere old friend,

"E. D. CLARKE."

"November, 1821.

"My dear Sister,—Of what possible use could it have been, in disclosing to you the bitter story of my distress: although great has been my manifold care, yet equally great has been the wish to conceal it from you. But now Death no longer flaps his bat-like wings against my face, I may tell you that I have narrowly escaped burying my beloved wife, now nearly approaching to her confinement, and three of my darling children. They were all attacked with dreadful fever, one after the other. It began in September, and has now left them like so many walking skeletons. My dear Angelica, with her head shaved, and blisters on her back, having lost forty ounces of blood from her arms. You may suppose what my sufferings have been; nor will you wonder that I am now the worst of the bunch. I managed nursing our blessed babes, and their angelic mother; but now that is over, I seem like a water-logged ship, going down bodily. I cannot bear the least noise; my head swims—my loins ache, and my whole frame is in a state of disorder. But my sufferings are trifling, compared to that which my dear wife and children have suffered. The blessing of their recovery makes me think all other evils *nothing*. Guess my agitation, when one

R r

evening, my poor servants entered the room where I was, saying, they "thought I ought to have some friend staying with me." And when I asked the reason, they answered, that "they feared I was deceived by the doctors, as they perceived the dear children were drawing off!" DRAWING OFF! Fortunately I had no great faith in their prognostics, well knowing that old nurses first get frightened themselves, and then endeavour to frighten every body around them. The symptoms were indeed dreadfully alarming; but they subsided, and my heart revived.

"Fifteen years have passed, in which we wanted not even an apothecary. My chubby brats were the talk of the whole place, for health; but then this fever. What a change! I had been to London, to Sir Astley Cooper, about my polypus, when all this fell sweep upon me. Beaumorce, Walpole, and Augusta failed. Horace, who was with me, in the midst of it, did not catch the fever: Edward and Paget were luckily at school. Good bye! Love to my dear nieces, and kind remembrances to Captain Parkinson.

"Your affectionate brother,

"E. D. CLARKE."

"*My Dear Sister*,—Angelica is safe in bed, with a chubby, black-eyed girl, as fat as a mole! You can have no idea what she has gone through, after all her illness. My house is fairly beset, such is the interest excited among all ranks, for a mother under such circumstances.

"I have had a hard gale to contend with, my dearest Anne, this year; but I will not croak, now God has so blessed me. Rents and tithes not paid—enormous expenses—and my wife and children dying. Now they are safe, I care for nothing else. But I had well nigh sunk. My love to your dear children. Remember me most kindly to your valuable husband.

"Ever your affectionate but weather-beaten brother,

"E. D. CLARKE."

"*Cambridge, January 22, 1822.*

"*My dear Sister*,—I still continue very ill, which must explain to you the whole course of my silence. I received your nice long letter from 'Dent-de-Lion,' and hope Captain Parkinson is recovered. I went to Eton with my two sons, Edward and Paget,—a great undertaking for me, and *too great* in the present state of my

health, being fit for nothing but to go to bed. Upon my arrival, I received a note from James, desiring to see me at Windsor Castle. I went up with my two boys, and should have gladly accepted his pressing invitation, and have staid with him a day, but I could not. I set off from Windsor almost immediately, and from Eton also the next morning, to avoid invitations and botherations. I am now again in my own nest, with my dear brats all bawling, and their angelic mother, whom, alas! Anne, you are destined not to know; for sick as I now am, I cannot go to Ramsgate. 'I cannot pass the Alps,' said the old maid in Hayley's Tale. You once mentioned a specimen of natural history. Could I but recover my health, I would not be thus unmindful; but as I am, I can do nothing. I beg you to believe, however, that I have not forgotten your request. Adieu! my dear sister.

"E. D. CLARKE."

No. VI.

Such was the unfading nature of the playfulness and buoyancy of Dr. Clarke's mind, even to the latest period of his life, that no subject, however serious (excepting always that of religion,) no degree of intensity in the pursuit, could prevent him from indulging occasionally in light and fanciful representations of it to his friends, and this under any form which either accident or the humour of the moment might suggest to him. Hence it happened that persons who did not know him well, and who regarded him chiefly through the medium of these ebullitions, were apt to form erroneous opinions of his acquirements.

The following verses, which are of the character I have mentioned, are supposed to have been written about this period:—

HERMES, TRISMEGISTUS, AND CHORUS OF GNOMES.

HERMES.

December is the season,
When bitter blasts are blowing;
Invoke then rhyme and reason,
Where crucibles are glowing.

SYLPHS.

See the Chemists take their stand?
Each his forceps in his hand!
Now's the time, ye jolly fellows,
Briskly ply the double-bellows!
See the inward white heat gleams,
Brighter than Aurora's beams!
Now's the time for incandescence!
Now's the time for phosphorescence!

Now's the time for sublimation,
 Bounces, bangs, and detonation,
 Flames and fumes, and calcination :
 All that gladdens expectation !
 Thus while bleak December lasts,
 Careless of its wintry blasts,
Edward Daniel, Holme, and Lunn,
 Wage their *Trumegistine* fun ;
 Round about the cauldron go,
 Sharing joys which Chemists know !

HERMES.

Let your metre now be sweeter,
 Saccharine as song can be :
 Bid the Chorus set before us,
 All the glories Chemists see !

Chorus of Gnomes, accompanied with musical Hydrogen tubes.

Oh for the joys,
 Of the Crucible Boys !
 The joy of all joys is the Crucible Boys !
 We burn up our cares
 Like a bundle of tares,
 While sorrow sinks down in the Crucible Boys !

This hullabaloo,
 Politicians may rue,
 And pedants pour over their pages :
 The Chemist alone,
 True wisdom has shown,
 Who deservedly ranks among sages.

CHORUS.

Then oh for the joys
 Of the Crucible Boys, &c.

His Crucible tells,
 By magical spells,
 That all things around him rejoice ;
 For he hears the great truth,
 Of "perpetual youth,"
 Proclaimed by a chemical voice !

CHORUS.

Then oh for the joys
 Of the Crucible Boys, &c.

Since "life's then a jest,"
 And Death a mere test,
 Where all men in Crucible lie ;
 Not a tear needs be shed,
 For the Chemist when dead,
 Who to live has been destin'd to die !

Chorus of Hermes, and all the Sylphs and Gnomes.

Then oh for the joys
 Of the Crucible Boys !
 The joy of all joys is the Crucible Boys.

No. VII.

The Gas Blow-pipe, or Art of Fusion by burning the Gaseous Constituents of Water: giving the History of the Philosophical Apparatus so denominated; the Proofs of Analogy in its Operations to the Nature of Volcanoes; together with an Appendix, containing an Account of Experiments with this Blow-pipe.

PREFACE.

THE Public is already in possession of the principal facts which have led to the history of the *Gas Blow-pipe*. The different claims made on the part of the Chemists of this Country and of *America*, as to the originality of the invention, have rendered it desirable to remove a few existing doubts, and to show, by a summary memorial, the progressive steps by which the philosophical *apparatus*, here delineated and described, has reached its present state of utility. The following pages are not, however, so much calculated for a general perusal, as they are for the inspection of persons already versed in chemical pursuits, and well acquainted with those parts of the detail applicable to the *Gas Blow-pipe* and to the manner of using it, which might otherwise require explanation. To their candid examination this statement is particularly submitted; in the hope that a sincere desire "to render to every one his due" will be found to have actuated the author in all that he has said upon the subject.

So far as the Sciences of *Chemistry* and *Mineralogy* are concerned, a greater degree of interest has seldom been excited than by the extraordinary instrument here denominated the *Gas Blow-pipe*; and it is conceived that this interest is not likely to suffer diminution by showing that in its principles of action it bears a striking analogy to the nature of a *Volcano*: exercising at the same time a degree of power in its operations, which not only corresponds with the agency, but in some respects perhaps surpasses the energies of *ÆTNA* and *VESUVIUS*.

Cambridge, January 19, 1819.

THE GAS BLOW-PIPE.

DISCOVERIES in Chemistry, as of Science in general, are often purely accidental. When they begin to excite notice, in consequence of their important results, Philosophers lay claim to them; either pretending to have anticipated the accidental occurrence by their own previous reasoning, or by maintaining that the circumstance of the discovery itself originated in some suggestion made by themselves or by their followers. This has been remarkably exemplified in the history of the *Gas Blow-pipe*;^{*} the origin of which, as far as relates to the burning of an explosive mixture of gases propelled through a common aperture and from a common reservoir, was entirely due to an accidental conversation held by the author with the maker of a blow-pipe invented for other purposes by Mr. Brooke.[†] The circumstances of this conversation have been elsewhere detailed:[‡] but if it should be asked how the maker of Mr. Brooke's blow-pipe became possessed of the information that the combustion of an explosive mixture might take place without explosion when propelled through a capillary tube, the answer is obvious; this fact was made known by the inquiry instituted respecting gas illumination: and it is notorious to the whole University of Cambridge, that the same truth, upon which the whole depends, was communicated by the late Professor Tennant, in his Public Lectures, so long ago as the Spring of the year 1814.§ Yet so little reliance was placed upon this information when the proposition was made for burning a highly explosive mixture of oxygen and hydrogen gases, that one of the most eminent Chemists in Europe was decidedly against the measure: || and even

* Called the *Oxy-Hydrogen Blow-pipe*, by Dr. Thomson and by other Chemists; meaning simply a blow-pipe in which the gaseous constituents of water, after undergoing compression in a mixed state, are propelled through a capillary tube, and exposed to combustion.

† The maker of this Blow-pipe was Mr. Newman, of Lisle Street, Leicester Square; in consequence of which it received the appellation of *Newman's Blow-pipe*; it was, however, invented by Mr. Brooke, as appears by his own account of it, in Dr. Thomson's "Annals of Philosophy" for May, 1816. See p. 367.

‡ See Journal of the Royal Institution, III. 105. Art. xii.

§ It was ascertained by the Professor and by Dr. Wollaston, during an investigation which took place as to the probability of explosion in gas reservoirs from a retrograde motion of the flame used for illumination: but the discovery is due to the original inventor of gas-light.

|| "Sooner or later," said Dr. Wollaston, in one of his Letters to the author, "a retrograde movement of the flame will cause the apparatus to explode:" and this prediction was verified, when all thoughts of danger were laid aside; the experiments having continued without any accident for a quarter of a year.

upon a trial being made, in consequence of a consultation with Sir *Humphry Davy* upon the subject,* the experiments were attended with so much danger, that the author, who persisted in making them, narrowly escaped being killed by the frequent bursting of his apparatus. It is evident, therefore, that something more was necessary than this information, as applied to one of Mr. *Brooke's* blow-pipes, in order to render the contrivance of any utility, either in Chemistry or in the Arts; namely, the *Safety Cylinder* afterwards invented and adapted to it by Professor *Cumming*.† without which the instrument itself is worse than useless. The author, reflecting upon the situation in which he was placed during his first experiments with this blow-pipe, when he was often surrounded by his friends and by the members of his family; especially when the explosions took place which he has before described;‡ has indeed reason to be thankful that both he and they were so providentially preserved: it becomes therefore a duty of gratitude to lay the greater stress upon that part of the invention to which, beyond all doubt, he is indebted for his present safety. Had it not been for this circumstance, it would have fallen to the lot of some other person to have written the history of the *Gas Blow-pipe* and to have rendered it rather tragical than amusing.

The present observations relate to the *Gas Blow-pipe* as used for burning a compressed mixture of *hydrogen* and *oxygen* gases, when propelled from a common reservoir. The first usage of these gases, in a state of mixture, as it was stated upon a former occasion,§ was believed to have been made by an unknown native of *Germany*; who employed for this purpose a bladder to which a capillary tube was affixed. The author received this information, upon report, after he began to write the account of his own experiments; but no one has since laid claim to the experiment, nor does he now know whether there be any truth in the rumour. He has been, however, the more anxious to repeat it, because upon the truth of it depend all pretensions to priority of invention. Dr. *Thomas Thomson*, now Professor of Chemistry at *Glasgow*, made experiments with the mixed gases, at *Edinburgh*, seventeen years ago; but was induced to abandon the undertaking, owing to the

* The application proposing the use of this explosive mixture for Mr. *Brooke's* Blow-pipe was made to Sir *H. Davy*, by the author, in May 1816. Sir *Humphry's* answer, in which he stated that he had tried the experiment, arrived on July 8th, of the same year.

† Rev. J. *Cumming*, M. A. Fellow of *Trinity College, Cambridge*, now Professor of Chemistry in that University.

‡ See an account of one of the explosions of the *Gas Blow-pipe*, when the gaseous mixture was as highly compressed as possible, in Dr. *Thomson's* "*Annals of Philosophy*" for November 1816. Upon that occasion, Messrs. *Macfarlane* and *Amos*, both Fellows of *Trinity College, Cambridge*, together with a servant, were present with the author, and standing close to the apparatus at the time of the accident. The reservoir for the compression of the gases, made of thick copper, was torn in pieces; and the fragments flew, with the force of cannon shot, in all directions, like the bursting of a bomb.

§ See *Journal of the Royal Institution*, III. p. 105. (Note.)

accidents which happened to his apparatus.* With respect to the application of *hydrogen* and *oxygen* gases to aid the operations of the blow-pipe, when propelled from *different* reservoirs through *different* apertures, by means of *hydrostatic* or other pressure, this contrivance is as old as the time of *Lavoisier*. The *American* Chemists lay claim to it, as their invention, in consequence of experiments made, in 1802, by Mr. *Robert Hare*, junior, Professor of Natural Philosophy in *Philadelphia*; of which an account appeared in *Dr. Bruce's Mineralogical Journal*,† and also in the *Annales de Chimie*.‡ Much about the same time, *Dr. Thomson* also carried on a series of experiments in the same way;§ and we have witnessed similar experiments, for at least a dozen years, during the chemical Lectures delivered in the University of *Cambridge*. The combustion of the *diamond* was always thus exhibited: and in *America* this plan is still pursued; that is to say, the two gases are propelled from different reservoirs, and through different apertures.|| But the intensity of the heat is incomparably greater when the gases, after compression, are propelled and burned in a mixed state; because the due proportion necessary for forming *water* is then constantly and equally maintained: whereas an excess, either on the side of the *hydrogen* or of the *oxygen*, not only tends to diminish the temperature, but if it be much increased on the side of the *oxygen*, infallibly extinguishes the flame.

As this method of aiding the operations of the *Blow-pipe* differs, in this essential particular, from every other hitherto employed, it is that to which (with all the improvements since made for ensuring the safety of the operator) the name of THE GAS BLOW-PIPE is now applied, and whose history it is the author's present purpose to relate. And this induces a second part of the inquiry; namely, what first suggested the propriety of mixing the two gases in the relative proportion for forming *water*? because upon the observance of this proportion the intensity of the heat mainly depends.¶

This circumstance was briefly stated in the first account which the author published of his experiments with the *Gas Blow-pipe*;** but the phenomena upon which it was founded, highly interesting as

* Of this, *Dr. Thomson* himself informed the author, in a Letter dated April 9, 1817.

† Vol. I. No. 2. p. 97. (Note.)

‡ See tom. xlv. p. 113. "*Mémoire sur l'usage du Chalumeau, et les moyens de Palimenter d'Air*," &c.

§ This is also stated in the Letter above mentioned.

|| Mr. *John Griscom*, Professor of Chemistry at *New-York*, who visited *Cambridge* so lately as January 9, of the present year 1819, and examined the author's method of using the *Gas Blow-pipe*, recommended the plan of different reservoirs, as that which he had adopted for his own Lectures, and which he deemed preferable, on account of its safety.

¶ At the same time it should be stated, as a curious fact, that pure *hydrogen* gas, when highly compressed, and propelled through a capillary tube, exhibits, during combustion, a very exalted temperature. The author has succeeded in fusing *Platinum* foil by means of this gas: and the combustion of *iron* wire, by burning pure *hydrogen* gas in this manner, is an experiment always attended with success.

** Journal of the Royal Institution, III. p. 104.

they are, do not seem to have met with that attention from scientific men to which they are entitled ; probably owing to the very short time usually bestowed by scientific travellers amidst the scenes where such phenomena are fearfully displayed. The author alludes to the phenomena attendant upon volcanoes ; the decomposition of *water* by *volcanic fire* ; the compression to which the *gaseous result* is liable ; its subsequent *combustion* ; the power of *fusion* it exhibits ; and, lastly, the horrible explosions which take place, whenever the whole of the compressed gas is exposed to combustion. If this happen, whole mountains, as it is well known, are blown into the air by the tremendous violence of the explosion, which is heard to the distance of many leagues, and the eruption ceases. But the minor explosions, or detonations, taking place at the mouths of narrow apertures in a volcano whence liquid rocks are ejected in the form of *lava*, are such as to resemble the loudest artillery. In these cases, a partial explosion of the gaseous mixture takes place ; exactly corresponding with the detonations which, upon a small scale, are heard at the orifice of the jet of the *Gas Blow-pipe* ; and bearing about the same comparison to the explosion of the *gas* reservoir, which the detonations at the mouth of a stream of *lava* do to the explosion of all the pent *gas* within the volcano. The Mountain *Vesuvius*, perhaps better than any other volcano, may serve to illustrate what has been here advanced ; because it is better adapted for examination than *Ætna*, or any other volcano where the *crater* is remote from the *syringes* or *jets* through which the *lava* is propelled. *Vesuvius*, so to speak, is, as to its chemical nature, in all respects a vast *Gas Blow-pipe* ; corresponding, in all its phenomena, with the appearances and effects, the explosions and detonations, the heat and the light,* exhibited by the apparatus which bears this name ; and differing from it only as the mighty operations of Nature in the universe differ from the puny imitations of the chemist in his laboratory. During twelve years that the author has delivered Public Lectures in the University of *Cambridge*, as it is well known to persons who have attended those Lectures, he has constantly thus explained the nature and effects of volcanic eruptions. Without the agency of *water* and its decomposition, these eruptions do not take place. Before any great eruption of *Vesuvius*, not only does the *water* disappear in all the wells of *Naples*, *Portici*, *Resina*, and other towns at the foot of the mountain, but even the sea retires ; and marine animals, abandoned by their native element, expire upon the shore. When the eruption took place which originated a new mountain three miles in circumference, near to the ancient *Puteoli*, now *Puzzuoli*, the whole

* There is no other way in which any idea can be given of the intense light beaming from the source of a stream of perfectly liquid *lava*, than by attending to the fusion of the most refractory substances before the *Gas Blow-pipe*, which exhibits an emanation of the same kind of light, comparatively, as the light of a *star* to that of the *sun*.

of the *Lucrine Lake* became dry.* If the water be converted only into steam, eruptions take place in which steam, and boiling water, and mud, are ejected together. Of this nature are the eruptions described by *Pallas*, as having happened, under his inspection, upon the *Cimmerian Bosphorus*, or *Straits of Taman*. But if, under all the circumstances of more exalted temperature and of the changes induced by chemical affinities,† WATER be decomposed, and its gaseous constituents exposed to combustion, the consequences will obviously be similar to those which *Vesuvius* has often exhibited, and to which the author was, during two years, almost uninterruptedly, an eye-witness. The two subjects are so intimately allied, that he may be excused for relating one instance out of many others, when he had an opportunity of verifying what he has now stated. In February of the year 1793, during frequent eruptions of *Mount Vesuvius*, Sir *William Hamilton* expressed a wish to have one point ascertained, of which he had not been able to procure accurate information; i. e. "whether the torrents of lava, at their sources, exhibited the substances of which lava is composed in a state of perfect or imperfect fusion" The late Lord *Palmerstone*, with many other of the *English Nobility*, and the present Sir *Charles Blugden*, were then in *Naples*, actuated by the same curiosity. It happened that a stream of lava broke out near to the crater; and when this is the case, the quantity of ejected matter being smaller, the danger of approaching the source of the torrent is thereby diminished. In this case, the only peril to be apprehended was from the crater itself; but the author, watching a favourable opportunity (when a strong wind carried the matter expelled from the crater towards a different side of the mountain from that whence the lava issued,) left *Naples*, in company with three other Gentlemen,‡ upon this expedition. They were accompanied by the late Lord and Lady *Palmerstone*, first to the *Hermitage*, and afterwards as far as what was called the second crater of the mountain; after which they proceeded up the cone of *Vesuvius*, and found the crater, at the summit, in a very active state, throwing out volleys of immense stones translucid with vitrification, and such heavy showers of ashes, involved in dense sulphureous clouds, as to render any approach to it extremely dangerous. The party ascended, however, as near to the summit as possible; then crossing over to the side whence the lava was issuing, they reached the bed of the torrent, and attempted to ascend, by the side of it, to its source. This

* Sir *W. Hamilton* was inclined to doubt this circumstance; perhaps not being aware of its being so usual a prelude to volcanic eruption. "It is commonly imagined," says he "that the new mountain rose out of the *Lucrine Lake*, which was destroyed by it: but in the account (of the eruption,) no mention is made of the *Lucrine Lake*:" he therefore proceeds to account for its disappearance by conjecture.—See Sir *W. Hamilton's Observations on Mount Vesuvius*, &c. p. 146. *Lond.* 1772.

† Such as those which result from the action of water on the metals of the earth, as ingeniously supposed by Sir *H. Davy*.

‡ The Hon. *Henry Tylton*, brother of the present Earl of *Thanet*; the Hon. Mr. afterwards Lord *Douglas*; and Colonel *Shutz*, of the Guards.

they soon found to be impossible, owing to an unfortunate change of wind ; in consequence of which all the smoke of the *lava* came hot upon them, accompanied at the same time with so thick a mist of minute ashes from the *crater*, and such suffocating fumes of sulphur, that they knew not what course to steer. In this perplexity, the author called to mind an expedient recommended by Sir *Wm. Hamilton* upon a former occasion, and proposed crossing immediately the current of the flowing *lava*, with a view to gain its windward side. All his companions were against the measure, owing to the very liquid appearance the *lava* then had, so near to its source : but while they stood deliberating what was to be done, immense fragments of rocks that had been ejected from the *crater*, and huge *volcanic bombs** which the smoke had prevented their observing, fell thick among them : vast masses of *slag* and of other matter, rolling upon their edges, like enormous wheels, passed by them with a force and velocity sufficient to crush every one of the party to atoms, if directed to the spot where they all stood huddled together. There was not a moment to be lost : the author, therefore, covering his face with his hat, descended the high bank beneath which the *lava* ran, and, rushing upon the surface of the melted matter, reached the opposite side, having only his boots burned, and his hands somewhat scorched. Here he saw clearly the whole of the danger to which his friends were exposed : the noise was such as almost to prevent his being heard ; but he endeavoured, by calling, and by gestures, to persuade them to follow. Vast rocks of indurated *lava*, from the *crater*, were bounding by them, and others falling that would have overwhelmed a citadel. Not one of the party would stir ; not even the guides accustomed for hire to conduct persons over the mountain. At last, he had the satisfaction to see them descend, and endeavour to cross the torrent somewhat lower down ; where the *lava*, from its redness, appeared to be less liquid ; and where the stream was narrower. In fact, the narrowness of the stream deceived them : the current had divided into two branches ; in the midst of which was an island, if such it might be called, surrounded by liquid fire. They crossed over the first stream in safety ; but being a good deal scorched upon

* These curious volcanic products are very common at *Naples*, although rarely seen in this country among the different substances exhibited in Collections as being brought from *Vesuvius*. The *Neapolitans* call them "*Vesuvian bombs*," "*Vesuvian drops*," and "*Vesuvian tears*:" they vary in magnitude, from the size of a sparrow's egg to the bigness of a cocoa-nut, and sometimes they are a great deal larger. The author found several of them weighing from fifty to sixty pounds. They have the form which matter in the most perfect state of fusion assumes by cooling in its passage through atmospheric air, and becoming hard before it reaches the ground. Falling in beds of the *Vesuvian* ashes, the mass remains unbroken, and the entire form is thus often preserved. It is pear-like ; although in some instances more inclining to the form of an oblate spheroid. The surface is rough, and rather porous : when broken, the interior is very compact ; but there is generally a piece of more porous *lava*, as a nucleus, towards the centre. These drops descend from the clouds accumulated over the cone of *Vesuvius*, during its most violent eruptions. It is to be remarked, that *Ferber*, in his *Catalogue Raisonné* of the *Vesuvian* productions, does not mention these bombs.

the island, they attempted the passage of the second branch ; in doing which, one of the guides, laden with torches and other things, fell down, and was terribly burned.

Being now all on the windward side, they continued their ascent ; the hellowings, belchings, and explosions as of cannon, evidently not from the *crater*, (which sent forth one uniform roaring and deafening noise.) convinced them they were now not far from the source. The *lava* appeared whiter and whiter as they advanced, owing to its intense heat ; and in about half an hour they reached the chasm through which the melted matter had opened itself a passage. It was a narrow fissure in the solid *lava* of the cone. The sides, smooth, compact, and destitute of that porous appearance which the superficies of *lava* exhibits when it has cooled under exposure to atmospheric air, resembled the most solid *trap*, or *basalt*. To describe the rest of the spectacle here displayed, is utterly beyond all human ability : the author can only appeal to those who participated the astonishment he felt upon that occasion, and to the sensations which they experienced in common with him, the remembrance of which can only be obliterated with their lives. All he had previously seen of volcanic phenomena had not prepared him for what he then beheld. He had often witnessed the rivers of *lava*, after their descent into the valley between *Somma* and *Vesuvius* ; they resembled moving heaps of scorizæ falling over one another with a rattling noise, which, in their further progress, carried ruin and devastation into the plains : but from the centre of this arched chasm, and along a channel cut finer than art can imitate, beamed the most intense light, radiating with such ineffable lustre, that the eye could only contemplate it for an instant, and by successive glances : while, issuing with the velocity of a flood, and accompanied with a rushing wind, this light itself, in milder splendour, seemed to melt away into a translucent and vivid stream, exhibiting matter in the most perfect fusion, running, like liquid silver, down the side of the mountain. In its progress downwards, and as soon as the air began to act upon it, the superficies lost its whiteness ; becoming first red, and afterward of a darker hue, until, lower down, black scorizæ began to form upon its surface. Above the arched chasm there was a small natural chimney, about four feet in height, throwing up, occasionally, stones attended with detonations. The author approached near enough to this aperture to gather from the lips of it some incrustations of pure *sulphur* : * the fumes of which were so suffocating, that

* Many of the yellow and orange-coloured salts of *Vesuvius* have been confounded with *sulphur*, in descriptions given of this volcano. The author once visited the *crater* after a violent eruption, and found the whole of the interior of that immense basin lined with saline deposits, exhibiting the most vivid and brilliant hues of the rainbow. The late Lord Palmerstone, who accompanied him, also witnessed this singular appearance. It is a rare occurrence ; the eruptions from the *crater* being seldom characterized by any such phenomenon. As these salts are deliquescent, they soon disappear ; either in consequence of the action of atmospheric air, or of steam from the volcano. Some which the author procured within the *crater*, of a bright sulphur

it was with difficulty, and only at intervals, a sight could be obtained of what was passing below. It was evident, however, that the current of *lava*, with the same indescribable splendour, was flowing rapidly at the bottom of this chimney, towards the mouth of this chasm: and had it not been for this vent, it is probable the party now mentioned could never have been able to approach so nearly as they had done to the source of the *lava*. The eruptions from the *crater* increased with such violence, that it was necessary to use all possible expedition in making the remaining observations.

Sir Wm. Hamilton entertained a notion, that large stones cast upon a current of *lava* would make no impression; inasmuch as it was always found to resist the weight of the human body at a certain distance from its source. Fatal indeed would have been the attempt to venture upon the *lava*, any where near this spot. It is true that light bodies made little or no impression, even at the source: * stones of five, ten, or fifteen pounds in weight hardly sunk at all; but bodies of sixty, seventy, or eighty pounds, when cast in, were seen to form a kind of bed in the melted matter, and so float away with it. A stone of about three hundred pounds in weight had been thrown out from the *crater* of the mountain, and remained near the source of the *lava*: this was raised, by the party present, upon one end; and rolled from the side of the channel, so as to fall into the melted matter, which was so liquid, that the stone gradually sank beneath the surface, and disappeared; becoming slowly invested with the substance in fusion, and then subsiding to the bottom. To the eye, indeed, notwithstanding its glutinous appearance, the *lava* seemed as if it might be stirred, like honey or molasses; and with a bar of iron properly bent for the purpose at the point, some of it might have been caught up, which, when being acted upon by the air, would instantly have been converted into a porous cinder or slag. When *lava* cools without being acted upon by the air, it is never porous, but becomes a solid and very compact body. Of this the proofs are numerous; the surface of the *lava* consisting always, when cooled, of scorizæ, and the inferior stratum of a compact stone. But a short time had elapsed after making this experiment, when a mass of matter, in perfect fusion, was ejected from the *crater*, to a considerable height in the air; whence descending

yellow, assumed an orange colour after deliquescence. They were analyzed by H. Warburton, Esq. of Trinity College, Cambridge, and proved to be *auriates of iron*; but with such an excess of *acid*, that, at the time of putting them into bottles with glass-stoppers, within the *crater*, leather gloves were instantly consumed, upon coming into contact with them.

* While the author was employed in making these remarks, some of the party amused themselves in placing raw beef-steaks upon the smooth surface of the *lava*; having seen the workmen in the Cornish smelting-houses do the same upon the melted tin, and being provided with meat and poles for the purpose. Much after the same manner as upon the metal in fusion, the steak sometimes disappeared instantaneously; but if it could be recovered almost in the moment when it came in contact with the *lava*, it proved exceedingly well flavoured.

upon the cone, it fell so near to the spot where the party now stood, that, running towards it, they found it flattened out and splashed into fragments which were more than redhot. One of these pieces, being kicked before them, in their descent from the source of the *lava*, until it became cool, was brought away, and proved to be a mass of scoria, exactly resembling the substance which covers a stream of *lava* when it has descended to any distance from its source; at which time the whole current, as it is impelled by the melted matter below, moving slowly onward, resembles nothing more than a rolling heap of cinders from an iron-foundry.

The eruptions from the *crater* were now without intermission: and the danger of remaining any longer near this place was alarmingly conspicuous. A huge mass, cast to an immense height in the air, seemed to be falling in a direction so fatally perpendicular, that there was not one of the party present who did not expect to be crushed by it: fortunately, it fell beyond the spot on which they stood, where it was shattered into a thousand pieces; and these, rolling onwards, were carried, with great velocity, far into the valley below. Not more than five minutes had elapsed after this accident, when the whole surface of the cone of *Vesuvius* near the source of the *lava*, which the party had rapidly quitted, was entirely covered by a shower of stones from the *crater*. The object of their undertaking had been, however, satisfactorily accomplished: it had been fully ascertained, not only that the *lava* issued from its source in a state of *perfect fusion*, but that this *fusion* was due to that exalted temperature which an explosive *gaseous mixture*, after the utmost compression, exhibits during its combustion. That this *gaseous mixture* results from the decomposition of *water*, is also evident; consequently, to imitate the power of fusion exhibited by a *volcano*, nothing more was necessary than to burn the gaseous constituents of *water* under similar circumstances: but here was the difficulty. Every clap of thunder in the atmosphere is sufficient to prove what the consequences are, where the gaseous constituents of *water*, when in a mixed state, become ignited, even by an electric spark: and who would venture to communicate flame to such a mixture, under compression, for purposes of experiment? The experiments which took place under *Lavoisier* at *Paris*, and all over *Europe*, for the composition of *water*, were an approximation towards it; because these experiments first proved that the gaseous constituents of *water* might be used to aid the operations of the blow-pipe. It was then, in fact, first made known, that the two *gases*, when burned separately, and propelled from different reservoirs, through different apertures, by hydrostatic pressure, towards one point (which was the method afterward pursued by Professor *Hare*, in *America*,) exhibited a degree of temperature capable of effecting THE COMBUSTION OF THE DIAMOND! Therefore, if it be requisite to trace the invention of the *Gas Blow-pipe* to the first principles which led to the whole of the contrivance, it is to these dis-

severies of *Lavoisier* that reference should be made. As soon as the invention of Mr. *Brooke's* Blow-pipe offered an easy method of compressing and propelling one of the gaseous constituents of water, while the other might be afforded by the combustion of a spirit-lamp, the author, of course, as he has before acknowledged,* availed himself of this apparatus; but finding, as he before said, that the heat was not sufficient for his purpose, "because the hydrogen was not afforded in its due proportion,"† he was directed, by the maker of the Blow-pipe to compress the *mixed gases*, and burn them, upon the principle of *gas illumination*, when propelled through a capillary tube. As to the relative proportion between the two *gases*, after all that he now has stated, and during twelve years has constantly repeated, upon the subject of Volcanoes, at his Public Lectures before the University of *Cambridge*,—it it necessary to ask, whether he would hesitate to mix them in the proportion for forming *water*? That he did not hesitate, it is evident; because in the very beginning of the earliest account which he published of his experiments with the *Gas Blow-pipe*,‡ and in the very first words of it, he mentions "*water* as the combustible for increasing the action of *fire*:"—and in a page almost immediately following,§ he states the relative proportion between the two *gases* which he had adopted; namely, "two parts, by bulk, of *hydrogen*, and one part of *oxygen*." If, in any publication anterior to the article here cited, it can be made to appear that the same proportion had been adopted by any other person, he foregoes, of course, all claim to this part of the improvement in the mode of using the *Gas Blow-pipe*.

Here, then, may terminate the detail of circumstances connected with the history of this valuable apparatus for *Chemistry* and *Mineralogy*. The few remaining pages of this publication will be appropriated to observations calculated to interest those who have attended to the narrative of the author's former experiments; because, in their frequent repetition, some new facts have been made known to him, some mistaken notions corrected, and some doubtful points confirmed.

Among the new facts which the use of this *Blow-pipe* has made known to the author, there is one of a nature so extraordinary, that its explanation will baffle the utmost research of Chemical Science, in its present boasted state of advancement:—it is this; that refractory bodies fused in a *charcoal* crucible, or suffered to fall, in a state of fusion, upon a piece of dry wood, become coated with the highest degree of *metallic lustre* which a metal is capable of exhibiting; yet this *metallic lustre* is so far *pseudo-metallic*, that it disappears upon the action of a file, being merely a superficial filmy investment of the substance fused. One of the most eminent Che-

* *Journal of the Royal Institution*, III. 105.

† *Ibid.* ‡ *Ibid.* 104. § *Ibid.* 107.

mists in *Europe*, in a letter to the author, calls this appearance "infinitely more deceptive than any thing of the kind he had before seen." A specimen of *silica* which had been fused upon *charcoal*, and afterwards exhibited this *pseudo-metallic* lustre, was sent to Dr. *Bostock*, then one of the Editors of the "*Annals of Philosophy*," who ascribed it rather to *vitrification*, than to the revival of a *metallic* body. And Dr. *Thomson*, also Editor of the same work, received from a correspondent at *Lewes* in *Sussex*, specimens with this *pseudo-metallic* appearance.* Where the results are of sufficient magnitude, being guided by an axiom respecting true *metallic* lustre which is mentioned by Dr. *Thomson* in his chapter on simple combustibles, the test of the file immediately discloses the real nature of the appearance:† but in cases where the most minute globules, hardly visible but with the aid of a lens, remain as the result of an experiment upon a *charcoal* surface, the truth cannot be so easily determined. Hence the author, in his own endeavours to revive *metals* before the *Gas Blow-pipe* upon *charcoal*, may have been deceived by such appearances; especially in cases where the seeming *metallic* lustre remained permanent. Every experiment of this nature demands a careful repetition with the most judicious caution.

Another new fact, for which we are indebted to the *Gas Blow-pipe*, is, that *wood-tin*, after fusion, *per se*, exhibits *metallic* lustre† upon the action of the file, without any revival of the *metal*; the *tin* still remaining in the state of an *oxide*: thereby contradicting at once the axiom before mentioned, and upon which a reliance has so long been placed; namely, that "no substance exhibits a *pseudo-metallic* lustre to the action of the file." In this instance, the degree of density which was hitherto considered as the peculiar characteristic of *metallic* bodies, enabling them to reflect so great a portion of light from their surfaces after being scraped or cut, is possessed by a body which is known not to be in the *metallic* state. Hence another conclusion may be deduced; i. e. that, independently of other tests, the action of the file cannot be relied upon as a criterion of the *metallic* nature of any substance.

Another new fact may also be mentioned here, although it has been already alluded to in a note to one of the preceding pages:

* See an Account of the action of the *Gas Blow-pipe* upon *Silica*, by *Joshua Mantell*, Esq. "*Annals of Philosophy*, for April, 1818," p. 310. Also Dr. *Thomson's* observations upon the same subject.

† *System of Chemistry*, vol. I. p. 313. *Lond.* 1817.

‡ Dr. *Thomson*, who examined it, says "it acquires a colour nearly similar to that of *plumbago*, with a very strong *metallic* lustre." (See *Annals of Philosophy* for July, 1817. p. 70.) Dr. *Thomson* also adds, that "this circumstance of *wood-tin* acquiring a *metallic* lustre, when fused, seems to decide a subject which has been agitated in this country with much keenness. It was asserted by Dr. *Hutton*, and is still maintained by his followers, that all *granite* has been in a state of igneous fusion. From Dr. *Clarke's* experiment, it may be inferred, with considerable confidence, that the *granite* in which the ores of *tin* occur has never been in a state of fusion."—*System of Chemistry*, p. 71.

namely, that *metals*, and among them even *platinum*, undergo complete combustion in the flame of pure *hydrogen gas*.

It has been doubted whether *platinum*, when it exhibits what has been called "*combustion*" before the *Gas Blow-pipe* really enters into any combination with *oxygen*. Some have thought that the dispersing results, during this supposed "*combustion*," are either impurities, or minute globular particles of the pure *metal* which have been driven off by the vehemence of the ebullition before the flame of the burning gaseous mixture. There is an experiment which seems to prove the contrary; but it requires caution under other hands; and therefore no other reliance will be placed upon it here, than is necessary to call the attention of Chemists towards its repetition. If, during the supposed "*combustion*" of *platinum*, a sheet of glass or of white paper be held below it, in such a position as not to intercept or enter into contact with the drops of *metal*, exceedingly minute *black particles* may be observed to fall upon it, like specks of *carbon*; but which there is this reason for believing to be the *black protoxide* of *platinum*; that if carefully collected and dissolved in *nitro-muriatic acid*, and the acid with gentle heat evaporated, and a drop of distilled water added, and afterwards touched with a glass rod dipped in *muriate of tin*, an orange-coloured precipitate will be visible. The author has exhibited this experiment, in the presence of his chemical friends: but as it is difficult, owing to the interruption caused by the falling of the melted *metal* upon the recipient, and also from the uncertainty of collecting a sufficient quantity of the *black particles*, so, of course, it is liable to failure.

Other results, respecting which doubts have been entertained by some of the Chemists of *London*, will be confirmed whenever the *Gas Blow-pipe* shall be so conducted in the metropolis as to afford the same intensity of heat which has afforded the results obtained in the University of *Cambridge*. That this has never been the case, hitherto, is evident from all the accounts published of the experiments with this blow-pipe in *London*. The fusion of *magnesia* could not be accomplished at the *Royal Institution*, (when the Archduke *Michael*, brother of the present Emperor of *Russia*, attended to witness the experiments,) until the action of the flame of the compressed gases had been combined with the agency of their powerful *galvanic battery*. Earl *Spencer*, who was present upon that occasion, and who informed the author of the manner in which the experiment was conducted, was also present in *Cambridge* when the same substance underwent fusion before the flame, simply, of the *Gas Blow-pipe*, without any other aid whatsoever. The danger of experiments with the *Gas Blow-pipe*, increasing in proportion to the extension of the diameter of the jet, will always be a bar to any full display of its powers, so long as Chemists continue to use the instrument without the *Apparatus* necessary for securing the safety of the operator; and it is solely to a want of attention to such precautions that persons have been unable to obtain satis-

factory results. Thus the decomposition of the *barytic* and *strontian* earths has not once been accomplished in *London*; although the fact of their decomposition at *Cambridge* be now no longer disputed.* The main cause of the failure with *barytes* in the metropolis has however been owing also to another cause; namely, that the trials have been very frequently conducted with a *hydrate*, instead of the pure earth. From causes, which the author cannot explain, it is become exceedingly difficult to obtain this earth in the proper state for exhibiting the revival of its *metallic* base. It has been, however, so often exhibited to Chemists who have visited *Cambridge* for the purpose, that all doubt being removed from their minds as to its *metallic* nature, they have ventured to explain the presence of the *metal* in another way. Of this an instance is mentioned in a Letter to the author from Dr. Thomson, dated July 4, 1817. It contains the following remark: "Dr. Paris, whom I have seen since his return from *Cambridge*, is of opinion that the *metallic* coating covering all the substances exposed to the action of your blow-pipe is derived from the *iron* held in solution by the *hydrogen* gas, which he says you prepare from *iron*. Prepare a little from *zinc*, and try whether you obtain the same results." The gas, in fact, had been as often prepared from *zinc* as from *iron*; therefore the observation of Dr. Paris tended to confirm the success of the experiment, because it so decidedly admitted the revival of the *metal*, by offering his testimony as to its presence. But some remarks upon this observation of Dr. Paris were made by a Chemist of the University,† at the time, which will not here be out of place: they are transcribed literally from the Paper which this gentleman communicated to the author upon the subject. He states,

1. "That the most minute portions of *iron*, as of *zinc*, may be detected by re-agents; but that the fused *barytes* yielded no traces of the presence of either of them."

2. "That if the *metallic* lustre were due to *iron* or *zinc*, it would be permanent, and not so fugitive as scarcely to admit of a minute's examination; which is the case."

3. "That the combustion of *iron*, when exposed to the burning gaseous mixture, is so instantaneous and perfect, as to leave no possibility of a 'film' of *iron* remaining upon the fused substance; and the same remark applies still more strongly to *zinc*."

Another of the most beautiful experiments with the *Gas Blow-pipe* in *Cambridge*, but which has not been repeated with equal success in *Great Britain*, is that of the combustion and volatilization of *gold*, and the deposition of its *oxide* upon pipe-clay; exhibiting the most lively rose colour. This experiment was described in a work before cited:‡ and as the success or failure of it entirely de-

* Dr. Thomson, who examined the *metal* of *barytes*, as obtained by means of the *Gas Blow-pipe*, has described it in the last edition of *Chemistry*.

† Francis Lunn, Esq. of St. John's College, *Cambridge*.

‡ *Journal of the Royal Institution*, III. p. 114.

pend upon the degree of temperature to which the *metal* is exposed, so it is proper to state that it requires the utmost intensity of heat which the flame of the *Gas Blow-pipe* has hitherto exhibited. Something of the same nature had been effected by foreign Chemists; but the results were less conspicuous, and doubts were always entertained respecting them. *Homburg* observed that *gold*, when placed in the focus of *Tschirnhaus's* burning-glass, was partly converted into a *purple oxide*; and the truth of his observations was confirmed by *Macquer*, using the very same instrument.* By means of *electricity*, and by the action of the *galvanic battery*, the *combustion* of *gold* has also been effected; and it is almost superfluous to add, that in all cases of *combustion* the *metal* is made to combine with *oxygen*:† but the beautiful result here alluded to, and which seems to be intermediate between the *protoxide* and the *peroxide*,‡ had not, in any former instance, been successfully obtained.

Some curious experiments have also been made respecting the *specific gravity* of *gold* when alloyed with *platinum*, and the colour of the former as affected by the presence of the latter. When pure *gold* is combined with *platinum* in the proportion of 84 of the *gold* to $8\frac{1}{16}$ of *platinum*, the colour of the *gold* is not altered; but the *specific gravity* of this alloy equals that of the purest *platinum*.

Another application of the *Gas Blow-pipe*, which may greatly enhance its value in the eyes of Chemists, is, that of using it as a means of detecting the colours of the *oxides* of metals, in cases where those oxides have not yet been otherwise chemically obtained and examined; serving as a guide to the Chemist, in his researches after those bodies. Thus, for example, by experiments made with the *Gas Blow-pipe*, we learn that one, at least, of the *oxides* of *calcium* has a *purple hue*;§ and that the same may be said of *magnesium* and of *strontium*.|| The *oxide* formed by the *combustion* of the *metallic base* of *barytes* is remarkably distinguished from either of the preceding *oxides*, by its *chrysolite green* colour.¶ To mention other results were only to recapitulate the accounts which the author has elsewhere already published.

A few words respecting the mode of using Professor *Cumming's* valuable addition to the *Gas Blow-pipe*; namely, the *Pneumatic* or *Safety-Cylinder*; will now conclude all that the author wishes to add upon the subject of the *Apparatus*. This part of the *Appara-*

* See Dr. *Thomson's Chemistry*, vol. I. p. 484. *Lond.* 1817. Also "*Dictionnaire de Chimie*," II. 148.

† A most remarkable fact is however stated by Dr. *Thomson* (*ibid.* p. 485.) who says, that when *Van Marum* made electric sparks from the powerful *Teylerian machine* pass through a *gold wire*, suspended in *hydrogen gas*, and other *gases* not considered as being capable of supporting *combustion*, the *combustion* of the *gold* was effected.

‡ An intermediate oxide was supposed by *Berzelius* to exist, and to constitute a component part of the *purple* of *Cassius*. *Ibid.* p. 487.

§ *Journal of the Royal Institution*, III. p. 108.

|| *Ibid.* p. 109.

¶ *Ibid.* p. 120.

tus is represented as a *Vignette* to the Preface. In the *Frontispiece*,* its situation is pointed out immediately under *fig. 5*, where the top of it, containing *wire gauze*, appears; and where one extremity of the tube of the *jet* (see 5, 6.) is screwed into it. In the *Vignette* to the Preface, the *safety-cylinder* is seen as when it is taken out of the reservoir. A. shows the cap containing the *wire gauze*; B. the *stop-cock*; C. the mouth of the *jet*; C. D. the length and volume of the flame: E. the interior of the cylinder, showing the height to which the *oil* ought to rise, when poured into it; F. a valve, at the bottom of the cylinder, communicating with the *gas reservoir* in which the *mixed gases* undergo compression; x. y. a *wire gauze* over the valve F. Whenever the flame C. D. has a retrograde motion towards A. a pretty smart detonation will be heard by the operator, owing to the explosion of the *gas* within the chamber E. It will then be necessary for him, first to close the stop-cock B.; and afterwards, by opening it, and applying his ear to the apparatus, to ascertain, by the bubbling of the *oil*, whether this fluid be still within the cylinder; because, in violent detonations, it is sometimes forced through the valve F. into the reservoir; in which case, there is always a probability that the next retrograde movement of the flame will cause an explosion of all the *gas* within the reservoir, and burst the main chamber of the *Blow-pipe*. But even in this case the operator will be protected from all chance of danger to himself, by means of the Screen represented in the *Frontispiece*; as the author has proved in more than one instance, when, owing to his persisting in his experiments after the *oil* had been expelled, accidents of this kind ensued. When the *safety-cylinder* was first adapted to the *GAS BLOW-PIPE*, *water* was used instead of *oil*, to interrupt the communication between the chamber E. and the main reservoir of the *gaseous mixture*; and there are Chemists, in London, who continue to make use of *water* for this purpose; maintaining, that the ebullition of *oil* is less distinctly audible, and that "it tends to diminish the intensity of the flame." But *oil* is greatly to be preferred: and it may be considered as a certainty, that if the intensity of the flame be really diminished, it is due to other causes; either to some obstruction in the tube or mouth of the *jet*, owing to its not being properly cleansed after each operation;† or to some impurity, or want of due proportion, in the

* For the *Frontispiece* and *Vignette*, referred to above, see the original edition of the "*Gas Blow-pipe*."

† Not only the tube of the *jet*, but also the chamber of the *safety-cylinder*, and of the reservoir, if necessary, should be carefully cleansed where *oil* has been used, because it corrodes the *copper*. The tube for the *jet*, at the least, ought to be 1-36 of an inch in diameter. It may be made of *copper*, well bronzed, in preference to *glass*. Many of the author's experiments were, however, conducted with *glass* tubes of 1-30 of an inch in diameter. For the fusion of large quantities of *platinum*, cuttings of *platinum* may be used, and these being placed within a *cupel*, or within a cavity scooped in a piece of *charcoal*, which answers the purpose, perhaps better, the end of a *copper jet* may be bent, so as to admit of a perpendicular instead of a horizontal direction of the flame upon the *metal*. In this manner, half an ounce of *platinum* cuttings, sold as waste, at 5s. per oz. may with ease be melted into a single globule as bullet, and afterwards rolled or drawn into wire for many useful purposes.

gaseous mixture. When the *hydrogen* is prepared from *iron*, and the *oxygen* from *manganese*, the author has always found that a mixture of nine pints of *hydrogen*, added to four pints of *oxygen*, will afford, by combustion, a much more exalted temperature than when the same gases are mixed in the proportion of eight pints of *hydrogen* to four pints of *oxygen*; or two volumes, by bulk, of *hydrogen* to one of *oxygen*. But, adverting to the use of *oil* in the *safety-cylinder*, as a substitute for *water*, it will be evident to every chemist, upon trial of it, that the more tranquil ebullition of the *oil* will render his situation the more secure; because when *water* is used, the whole chamber of the *cylinder* becomes filled with foam; which is less likely to intercept the progress of explosion than *oil* in a state of ebullition. *Water*, moreover, propelled as steam from the *jet*, is a serious impediment to the *de-oxydizing* process; whereas *oil* always tends to promote it. Many *metallic oxides* are decomposed by *oil* at a boiling heat, and some of the *fixed oils* absorb *oxygen* at the common temperature.* Hence the use of *wax* and *tallow* in reviving *metals* from their *oxides*.

To conclude; the great barrier to investigation being removed in the annihilation of infusibility by the extraordinary powers of the *Gas Blow-pipe*; the utility of the instrument in analytical chemistry manifested; and the safety of experiments with this apparatus altogether established;† the author has only to recommend the use of it in a more particular manner to the *mineralogist*, owing to the characteristic changes, by which all mineral substances may be distinguished when exposed to its ordeal. The most *refractory* bodies now exhibit their peculiarities in *FIRE* as well as the most *fusible*; and in viewing them, he may call to mind the observation made by THEOPHRASTUS the *Lesbian*; first the disciple of PLATO, and afterwards of ARISTOTLE; who, in the Lectures which he delivered in the *Lyceum* at *Athens*, about two thousand years ago, directed the attention of *mineralogists* to these phenomena:‡ 'Εἰς αὐτὴν τὴν καύσιν καὶ πυρρῶσιν πλείους ἔχοντες διαφορὰς.

Appendix to the Gas Blow-pipe.

THIS account of the *Gas Blow-pipe* was undertaken with an intention of restricting the narrative to such observations only as relate to the history of the Apparatus, and have not before been

* *Aikin. Chem. Dict.* vol. II. pp. 176, 177.

† During an entire course of Public Lectures in *Mineralogy* delivered before the University of Cambridge, experiments with the *Gas Blow-pipe* were daily exhibited after the manner here specified, without a single accident, or even a momentary interruption.

‡ "In isâ combustione et ignitione plures habent differentias." *Theophrasti de Lapid. Liber.* ed. J. de Lart. L. Bat. 1647.

published ; but it has been suggested to the author, that, as the accounts of his experiments with this instrument are dispersed in different periodical works, it is desirable for facility of reference, and for the greater convenience of persons repeating the same experiments, that they should be brought together under one point of view. At the same time, in doing this, it is proper to mention that the following account of those experiments is not merely a repetition. Some new trials have been made ; and those which were described before have been so often and so carefully repeated, that a due reliance may be placed upon the accuracy of the statement. The *Mémoire* published by *Lavoisier* of his experiments upon the action of fire aided by oxygen gas ;* and *Erhmann's* Essay upon an Art of Fusion, conducted by the same means, to which the *Mémoire* of *Lavoisier* was affixed ;† have been followed, as models, in drawing up the following summary.

PART THE FIRST:

Consisting of METALLIC ORES infusible before the Common Blow-pipe, and reducible by the Gas Blow-pipe to the metallic state ; often undergoing combustion in the moment of their revival.

L PURE OXIDE OF CALCIUM. (*Lime*.)

N. B. This substance is placed first ; because neither *Erhmann*,‡ nor *Lavoisier*§ could accomplish its fusion ;|| and because it occurs first in the author's *Methodical Distribution of Minerals*.¶ It is, therefore, the first substance, of which the fusion is annually exhibited before the University of *Cambridge*.

LIME, in a state of perfect purity, and in the pulverulent form, being placed within a *Platinum* crucible, and exposed to the flame of the *Gas Blow-pipe*, its upper surface became covered with a limpid botryoidal glass, resembling *Hyalite* : the inferior surface was quite black. Its fusion was accompanied by a lambent purple flame : this colour therefore, may be considered as a characteristic hue of one, at least, of the *Oxides of Calcium*.

* *Mémoires de M. Lavoisier sur l'action du feu animé par l'air vital, sur les substances minérales le plus réfractaires, publiés dans les Mémoires de l'Académie Royale des Sciences, années 1782 et 1783.*

† *Essai d'un Art de Fusion à l'aide de l'air du Feu, par Mr. Erhmann, &c. Strasbourg, 1787.*

‡ "Il en est de même des terres, &c. On les fond toutes, excepté la terre calcaire pure." *Essai d'un Art de Fusion*, p. 62.

§ "La Chaux n'étoit point fondue - - - Cette même Chaux exposée au foyer du grand verre ardent de *Tschirnhausen*, ne donne AUCUN INDICE D'ALTERATION." *Mémoire de M. Lavoisier*, *ibid.* p. 268.

|| Professor *Hare*, in *America*, could not accomplish the fusion either of LIME or MAGNESIA, *per se*, by means of his hydrostatic blow-pipe. See *Annales de Chimie*, tom. xiv. p. 136.

¶ *Syllabus of Lectures in Mineralogy*, p. 4. *Lond.* 1818.

II. CRYSTALLIZED CARBONATE OF LIME.

(Iceland Spar.)

During the attempt to fuse this substance (which is more refractory than any other, excepting the *Hydrate of Magnesia*), a beautiful lambent flame, of an intense *amethystine* hue, was exhibited. The same remarkable indication of combustion characterizes all the compounds of *Lime* before the *Gas Blow-pipe*. Its fusion was at last effected; and the result, a *brilliant limpid glass*.

III. HYDROUS CARBONATE OF LIME. (*Arragonite*.)

Owing to the crumbling disposition of this mineral when exposed to heat, its fusion is difficult to obtain; but its result agrees with that of pure *Lime*, and it is accompanied by the exhibition of *purple* flame, as in the instance of other *Limestones* and of *Strontian*.

IV. COMMON CHALK.

Easily fusible into a *yellowish gray enamel*. By further continuance of the heat, a clear pearly glass may be obtained, resembling *SANTILITE*; or *Siliceous Pearl Sinter*. The fusion of *CHALK* is also accompanied by the exhibition of a *purple* flame.

V. OOLITE. (*Ketton Stone*.)

This is one of the purest of the *Carbonates of Lime*,* and its fusion is proportionally difficult. It was, however, perfectly accomplished by means of the *Gas Blow-pipe*, in the presence of the Rev. Mr. Gorham, and Mr. Carr, of *Queen's College, Cambridge*, January 22, 1819, who were also present during all the following experiments with the *Limestones*. The *Oolite*, during fusion, exhibited a *purple flame*, attended by the escape of dense white fumes. It was fused into a *yellowish gray glass*, with mammillary intumescence.

VI. COMPACT TRANSITION LIMESTONE. (*Limestone of Parnassus*.)

The specimen was taken from the summit of *Parnassus* by the author. It was fused, but with great difficulty; exhibiting, after fusion, a *white milky enamel*, with points of intumescence that were transparent.

* It was analyzed by the Rev. J. Holme, of *St. Peter's College, Cambridge*; who found it to consist wholly of *Lime* and *Carbonic Acid*.

VII. PRIMARY FOLIATED LIMESTONE.
(*Naxian and Thasian Marble.*)

One of the flakes of this broad-grained sparry variety of the *Parian Marble* was exposed to the most intense heat of the *gaseous flame*, which was immediately tinged by it, and assumed an intense purple hue, depositing a white oxide on the polished iron forceps used in supporting it. In a few seconds it was fused, and appeared covered with a *snow white enamel*, reflecting a great deal of light. The edges were also covered with a *white opalescent and translucent enamel*; exhibiting the colours and play of light of the noble *opal*. Here the fusion was quite perfect.

VIII. LIMESTONE FROM THE SUMMIT OF THE PRINCIPAL PYRAMID IN
EGYPT.

This kind of *Limestone* is of a whitish-gray colour: it has an earthy fracture; and when briskly scraped with a sharp piece of iron, exhales powerfully the fetid odour of *sulphuretted hydrogen gas*. Exposed to the *gaseous flame*, dense white fumes were evolved; its fusion was then accomplished, and the result resembled that which was obtained in the fusion of *chalk*; namely, a *white frothy enamel*, full of bubbles.

IX. MATRIX OF THE HUMAN SKELETON DISCOVERED AT GUADALOUPE.
—(*Calcareous Tophus—Tufaceous Limestone.*)

The fusion of this substance is extremely difficult; but it was satisfactorily accomplished; and the result was a most perfect *snow-white enamel*, beautiful in its intense whiteness. When first exposed to the *gaseous flame*, intumescence was visible, and the flame became tinged with a lively *amethystine purple* hue: a fine *white oxide* being deposited upon the iron forceps.

X. ANCIENT GIALLO ANTICO MARBLE FROM THE RUINS OF HADRIAN'S
VILLA AT TIVOLI, NEAR ROME. (*Exceedingly compact Limestone.*)

This substance is nearly as refractory as *Iceland Spar*. During its fusion, the *gaseous flame* became tinged of a *purple colour*; and a *white oxide*, the result of combustion, was deposited upon the iron forceps. The ultimate result of its fusion was a *snow-white enamel*. Being placed in a *charcoal crucible*, it was deprived of its yellow colour, and a *halo* was formed round the mineral, upon the *charcoal*, of a yellow hue.

XI. ANCIENT ROSSO ANTICO MARBLE FROM POMPEII.
(*Compact granular Limestone.*)

More readily fused than the preceding variety. *Purple flame.*

The edges rounded, and beautifully glazed. *Translucid enamel*, resembling the purest *Chalcedony*.

XII. CRYSTALLIZED PHOSPHATE OF LIME. (*Apatite*.)

No decrepitation. Phosphorescence. Fusible into a *black shining slag*; depositing on polished iron forceps a *cupreous-coloured oxide*. Afterward scintillation, denoting a more evident effect of combustion, accompanied by a *reddish coloured flame*. Upon filing the slag, a globule appeared with a high degree of *metallic lustre* resembling that of *silver*. Its real nature unknown. It does not alter by exposure to air. This globule is still preserved by Francis Lunn, Esq. of St. John's College, Cambridge.

XIII. PHOSPHATE OF LIME OF ESTREMADURA.
(*Compact Apatite*.)

Easily fusible into a *white enamel*, resembling, as to its external appearance, *spermaceti*.

XIV. GRANULAR SPARRY PHOSPHATE OF LIME. (*Apatite*.) detached from its matrix of *magnetic iron oxide*, as found at Gellivara in Lapland.

This substance was fused into a *chocolate-brown glass*, which, owing to the iron present, acted upon the magnet. The colour must also be attributed to the iron.

XV. PURE OXIDE OF MAGNESIUM. (*Magnesia*.)

Fusion, *per se*, extremely difficult. When the powder is made to adhere (by moisture with distilled water and subsequent desiccation,) and placed upon charcoal, it is fusible into a *whitish glass*; but the parts in contact with the charcoal acquire an imposing *pseudo-metallic lustre*. *Purple-coloured flame*.

XVI. HYDRATE OF MAGNESIA. (*Pure foliated Magnesia from America*.)

This substance is incomparably refractory: with the utmost intensity of the heat of the *Gas Blow-pipe*, it is ultimately reducible to a *white opaque enamel*, invested with a thin superficies of *limpid glass*. Its fusion is accompanied with a *purple coloured flame*.

XVII. ICONITE. (*Pagodite of China*.)

Easily fusible into a *beautiful limpid glass*, exhibiting a high degree of brilliancy.

XVIII. COMOLITE. (*Potstone.*)

Easily fusible, with combustion: the fused mass exhibiting to the naked eye a *dingy green-coloured glass*, almost *black*. Examined with a lens, it appears full of limpid acicular crystals, highly transparent.

XIX. TALC.

All the foliated varieties of this mineral are fusible into a *greenish glass*.

XX. SERPENTINE.

Most of the varieties of *Serpentine* exhibit, after fusion, globules of an *oak-apple-green colour*, with indented surfaces.

XXI. PURE OXIDE OF ALUMINUM. (*Alumina.*)

Fusible, without difficulty, into a *snow-white opaque glass*.

XXII. CRYSTALLIZED OXIDE OF ALUMINUM. (*Sapphire.*)

A fine dodecahedral crystal of pure blue *Sapphire* was readily fused; and exhibited, during fusion, the singular appearance of *greenish glass balloons*, swelling out in grotesque forms, which remained fixed when the mineral became cool.

XXIII. CRYSTALLIZED RED CORUNDUM. (*Oriental Ruby.*)

Two *rubies* were placed upon *charcoal*, and exposed to the flame of the *Gas Blow pipe*. Their fusion was so rapid, that it was feared the liquid substance would either become volatilized, or sink into the mass of *charcoal*. The current of the *gaseous mixture* penetrated this liquid matter, like a stream of air acting upon oil. After suffering it to become cold, a white and opaque globule remained; the two *rubies* were melted into one bead, and had lost their *red colour*. Being a second and a third time suffered to undergo fusion, the same bead assumed a variety of shapes, resembling *Sapphire* after fusion. The *charcoal* communicated to it a superficies with *pseudo-metallic lustre*, which came off upon the fingers. A sensible diminution of bulk appearing after the third fusion, the operation was concluded. The bead then exhibited a pale *pink colour*.*

* The author will take this opportunity of acknowledging the assistance he has received, in being enabled to repeat his experiments with *Sapphires*, *Rubies*, and *Emeralds*, by the kindness of *Edmond Waller Rundell, Esq.* who supplied pure specimens for this purpose.

XXIV. COMMON CORUNDUM.

(*Greenish-gray crystallized primary Corundum, from the East Indies.*)

Fusible, but with difficulty, into a *greenish coloured translucent glass*, nearly transparent, which at last becomes melted into a bead-like form; or otherwise exhibits upon its surface minute cavities, caused by the escape of *gas* during its fusion. This *gas* is probably the same which *pure Silica* more abundantly exhibits. A slightly-coloured *greenish flame* accompanies the fusion of *Corundum*.

XXV. SUB-SULPHATE OF ALUMINA. • (*Alumina of Newhaven.*)

This curious mineral admits of a very rapid fusion: the result is a *pearl-white translucent enamel*. A partial combustion may be observed to take place during its fusion.

XXVI. WAVELLITE.

Easily fusible into a *snow-white enamel*, resembling that of *pure Alumina*.

XXVII. RED SIBERIAN TOURMALINE.

(*Apyrous Tourmaline—Rubellite.*)

Loss of colour; fusible into a *white opaque enamel*;—by further continuance of the heat, into a *limpid glass*.

XXVIII. ANDALUSITE.

(*Apyrous, or infusible Feldspar of Haüy.*)

Easily fusible into a *snow-white enamel*.

XXIX. CYMOPHANE.

(*Chrysolite, and Grislit of the London Jewellers; also Chrysoberyl.*)

Fusible into a *pearl-white enamel*.

XXX. CYANITE. (*Sappare. Disthène.*)

This mineral, owing to its refractory nature, was used by *Saussure* as a supporter, in experiments with the common *Blow-pipe*. It fuses very readily into a *snow-white frothy enamel*.

XXXI. HYPERSTENE.

Fusible into a *jet-black shining glass bead*, with a high degree of lustre.

XXXII. ZIRCON. (*Jargoon.*)

One of the most refractory substances. Exposed to the powerful

heat of the *Gas Blow-pipe*, it becomes first opaque, and of a white colour; afterwards, its superficies undergoes a partial fusion, and exhibits a *white opaque enamel*, resembling *porcelain*.

XXXIII. SPINELLE. (*The Spinelle Ruby.*)

Fuses readily, and undergoes a partial combustion and volatilization, with loss of colour and of weight. One of the solid angles of an octahedral crystal of *Spinelle* was entirely burned off, and volatilized, in one of these experiments.

XXXIV. AUTOMALITE.
(*Spinellane. Zinciferous Corundum.*)

Fusible into a *gray enamel*, which intumesces, and, when cold, exhibits upon its surface a crystallization resembling that of water upon a pane of glass. During its fusion, a deposit takes place upon the iron forceps used to support it, which is an *oxide* of a *yellow* and *yellowish-white* colour.

XXXV. TOPAZ.

Fusible into a *white enamel*, covered with minute limpid glass bubbles.

XXXVI. FYCNITE.
(*Red Schorl. Schorkite. Schorlaceous Beryl.*)

Fusible into a *snow-white enamel*.

XXXVII. PURE PRECIPITATED SILICA.
(*Peroxide of Silicium?*)

Becomes instantly fused into an *orange-coloured transparent glass*. The colour may be due, either to the *charcoal* serving as a support, or to the *carbon* of the *oil* used for making it into a paste. During the fusion of *Silica*, and so long as it be held in a liquid state before the flame of the *Gas Blow-pipe*, a *gaseous* substance is constantly escaping, in the form of bubbles, which rise and burst. The mass, at the same time, suffers little sensible diminution, although volatilization is evidently going on. As to the real nature of *Silica*, very little satisfactory information has hitherto been obtained: after a century spent in constant experiments, for ascertaining the real history of this extraordinary *combustible*, Chemists remain nearly in the situation of *Henckel*, when he made that remarkable exclamation—"O *Silex*! *Silex*! quæ te *matricula* gessit?"*—When *Silica*

* De Orip. Lapid. cap. i. 54. 110°:

is fused in a *charcoal* crucible with an equal bulk of *iron*, the two substances combine ; and the result, apparently, is an *alloy*, whiter than *iron*, but differing from this metal, in other properties, which have been noticed by *Berzelius*.^{*} Whether *Silica* be really a *metallic* body, or, as it is believed by some of our own Chemists,[†] a combustible resembling *Boron* and *Carbon*, remains to be determined. The Experiments with the *Gas Blow-pipe*, have not, in any degree, tended to explain the nature of this substance. The *dark-coloured powder* called *Silicon*, which was obtained by Sir *H. Davy* (who decomposed *Silica* by passing *Potassium* in excess through it, in a *Platinum* tube,) would be the proper substance for trial in the exalted temperature of the *Gas Blow-pipe*. It is said to be "capable of bearing a very high temperature, without undergoing any change,"[‡] resembling, in this respect, *Boron* and *Carbon*. Possibly this *dark-coloured powder* may be a *protoxide* of *Silicium*. An experiment which the author wishes to propose, if *Silicon* cannot be obtained in a separate state,[§] is to expose a small *Platinum* tube containing this *dark powder* mixed with the *potass* which has been made by the decomposition of the *Silica*, and to examine the result which might remain after the complete fusion of the *Platinum*, and the volatilization of the *alkali* before the *Gas Blow-pipe*.—Possibly, in this manner, *Silicon* itself might either be decomposed, or made to enter into combination with *Platinum*, or undergo some change which would make us better acquainted with its real nature.

XXXVIII. HYDRATE OF SILICA.

(*Santilate*.—*Pearl Sinter*, discovered in *Tuscany*, by Professor SANTI, of *Pisa*.)

Perfect fusion into a *translucid pearly enamel*, which becomes globular, and is full of air-bubbles. Dense *white fumes* are evolved during the whole process.

XXXIX. HYDRATE OF SILICA. (*Hyalite*.)

^{*} Fusible into a *snow-white frothy enamel*, full of brilliant limpid bubbles. The specimens fused were selected from masses highly diaphanous, which invested the surface of decomposing *Trap*.

^{*} A combination of *Iron filings*, *Silica*, and *charcoal*, after undergoing complete fusion, and being obtained in the form of globules, when dissolved in *muratic acid*, gave out a greater proportion of *hydrogen gas* than the same weight of pure *iron* would have furnished. See *Thomson's Chemistry*, vol. I. p. 253. London, 1817.

[†] *Ibid.* p. 252.

[‡] See *Thomson's Chemistry*, p. 252.

[§] *Silicon* is converted into *Silica*, by coming into contact with *water*: hence the impossibility of washing off the *Potass*, to obtain it in a separate state. *Ibid.*

XL. HYDRATE OF SILICA.
(*Sand Tubes of Drigg, in Cumberland.*)

Instantaneous fusion, similar to that of *Hyalite*, into a bead of pure limpid glass, containing bubbles.

XLI. HYDRATE OF SILICA. (*Opal.*)

Perfect fusion into a *pearl-white enamel*; resembling *Santilite* in its natural state.

XLII. HYDRATE OF SILICA. (*Chalcedony.*)

Perfect fusion into a *snow-white enamel*.

XLIII. HYDRATE OF SILICA. (*Egyptian Jasper.*)

After being exposed to a strong heat in a *Platinum* crucible, for the purpose of driving off the water of absorption, and thereby preventing decrepitation, this hydrate was easily fused into a *greenish glass*, full of bubbles.

XLIV. HYDRATE OF SILICA. (*Common Flint.*)

Perfect and very rapid fusion into a *snow-white frothy enamel*.

XLV. CRYSTALLIZED SILICA. (*Rock Crystal.*)

The most highly diaphanous specimen that could be procured was exposed to the flame of the *Gas Blow-pipe* with perfect success. In the first trial, the edges only were fused, and resembled *Hyalite*. In the second trial, the fusion was completed; the crystal then appeared in the form of one of *Prince Rupert's drops*; having lost nothing of its transparency, but being full of bubbles.

XLVI. COMMON WHITE QUARTZ.

Fuses much more readily than *Rock crystal*. This was observed by *Lavoisier*; when having failed in his endeavour to melt *Rock crystal*,* he accomplished the easier fusion of *common white Quartz*. Hence he inferred that *white Quartz* is not a simple substance, as it is commonly believed to be; but that, besides *Silica*, it holds in combination some other foreign ingredient, hitherto unobserved,

* "Le feu le plus violent qu'on ait encore pu produire sur cette substance (le cristal de roche) ne lui enlève ni sa transparence, ni aucune de ses propriétés."—*Mémoire de M. Lavoisier sur l'effet que produit sur les pierres précieuses un degré de feu très-violent*, p. 319. *Strasbourg*, 1787.

to which its *opacity* and *fusibility* are due,* in its fusion, however, it agrees with *Rock crystal*, the results in either case being precisely the same.

XLVII. LEUCITE.

(*Amphigene. White Garnet of Vesuvius.*)

This substance is also fusible into a *perfectly limpid glass*, containing air-bubbles.

XLVIII. PERUVIAN EMERALD.

Readily fuses into a round head of the most highly limpid glass, without bubbles; being thereby entirely deprived of colour, and resembling, after fusion, the limpid white *Sapphire*.

XLIX. SIBERIAN BERYL.

(*Aigue Marine. Asiatic Emerald.*)

Fusible into a *limped glass*, containing bubbles. This substance is sometimes described as fusible by means of the *common Blow-pipe*; but the author was never before able to accomplish its fusion.

L. LAZULITE. (*Lapis Lazuli.*)

Fusible into a transparent and almost *colourless glass*, slightly tinged with a *green colour*, and full of bubbles.

LI. GADOLINITE. (*Ytterbite.*)

Fuses with rapidity; exhibiting a *jet-black shining glass*, with a high degree of lustre.

PART THE SECOND.

Consisting of METALLIC ORES, either incapable of being volatilized by the Common Blow-pipe, or infusible by means of that instrument; all of which are either reducible to the metallic state before the Gas Blow-pipe, or undergo combustion and volatilization in the moment of their revival.

N. B. In proceeding to state the revival of two of the *metals* of the *Earths* before the flame of the *Gas Blow-pipe*, and of other *metals* under similar circumstances, it may be proper to prefix the ingenious theory of the Rev. J. Holme, of St. Peter's College, Cambridge, respecting the cause of the decomposition which takes

* "Que le Quartz, même le plus pur et le plus blanc, prend à sa fois un degré de ramollissement beaucoup plus sensible que le cristal de roche, UNE ESPÈCE MÊME DE fusion, ce qui semble annoncer que le Quartz n'est point une matière simple, comme on le pensoit, et qu'il contient, outre la substance qui lui est sans doute commune avec le cristal de roche, une matière étrangère qui lui donne l'opacité, et qui lui communique un certain degré de fusibilité."—*Ibid.*

place: "It is entirely owing to the powerful attraction which *hydrogen* has for *oxygen* at such an exalted temperature."—The reduction or decomposition of *oxides*, when exposed to the gaseous flame, is therefore often instantaneous; and it is as instantly followed by the combustion of the minute particles of metal thus revived; and ultimately by the deposition of the regenerated *oxide*, which is a result of that combustion. Hence the coloured flame: hence, also, the appearance of an *oxide* in a state of incomparably extreme division upon the supports used, whether of metal or charcoal; an irrefragable test of the revival of the metal from whose combustion this newly-formed *oxide* has been derived.

For the success of the next ensuing Experiment, it is absolutely necessary that the *Barytes* should not be in the state of *hydrate*; yet it is difficult to procure it entirely destitute of water. The manner of its fusion before the *Gas Blow-pipe*, will instantly show whether the experiment will succeed or fail. If there by any *deliquescence*, it will fail; or if the *Barytes*, instead of being fused into a slag of a deep jet-black colour, assume a grayish and horny appearance, it will also fail. But as the success of the experiment has so often been attested, and in a public Lecture Room, where it has been repeated over and over again, until every person present expressed his conviction as to the revival of the metal—and, moreover, as the fact of its revival is admitted by the greatest Chemist now living, to whom the metal of *Barytes* was transmitted in *Naftha* from *Cambridge*—the author, without further observation, will proceed in the account of his Experiments.

LII. PURE OXIDE OF PLUTONIUM,* OF BARIUM.
(*Barytes. Barytic Earth.*)

A portion of this *oxide*, prepared by Mr. W. Allen,† (adhering in a thin cake, as it came from the crucible) was supported in a pair of forceps made of *slate*, and exposed to the flame of the *Gas Blow-pipe*. It became fused very readily, and assumed the form

* In proposing the substitution of *Plutonium*, instead of *Barium*, for the name of the metal of *Barytes*, the author was actuated solely by a regard to truth, as essential to science. The impropriety of naming one of the lighter metals, from *Baris*, signifying heavy, will surely be obvious, when it now appears that the name implies an untruth. The specific gravity of the metal of *Barytes* equals 4.000. With what propriety, therefore, can it be denominated *Barium*, the heavy metal? Yet nick-names are hard to remove: and that this is a nick-name is evident, because it is notorious that it was given to the base of *Barytes* by anticipation, as soon as the illustrious Chemist, who afterwards applied this name to it, had decomposed the *alkalies*; long before he himself admitted the appellation. The metal of *Barytes*, in whatsoever manner its presence may be demonstrated, owes all the proofs of its existence to the dominion of fire; hence the propriety, at least, of giving to it the name of PLUTONIUM. Has it ever been deemed improper to suggest the alteration of a name, when it involves an error? Was not this done with respect to *muratic acid*? The name which *Priestley* bestowed upon *Oxygen*, was changed first by *Condorcet*, afterwards by *Javohsier*; and now the name of the same substance is again likely to undergo an alteration.

† Of Plough Court, Lombard Street, London.

of a *jet-black shining slag*: its fusion being accompanied with a *chrysolite-green-coloured flame*, and, in some instances, with a slight degree of *scintillation*: at the same time, dense *white fumes* were evolved, and the supporter became invested with a *white oxide*, evidently a result of the *combustion* which had taken place. The *slag* being now examined, exhibited externally the dark metallic aspect of the *stalactitic oxide of manganese*; upon being submitted to the action of the file, it was sonorous; and when cut by the file, a *regulus* was disclosed, having the *metallic lustre of silver*, or of pure *iron*, and reflecting as much light. When cast into water, gaseous bubbles were evolved, until the whole of the *metal*, by decomposing the water, was again converted into *Barytes*. Also, if left exposed to the action of atmospheric air the *metallic lustre* disappears, and the whole of the *slag*, gradually combining with *oxygen*, falls into a white powder, which is *Barytes*. Other properties characteristic of the *metallic base of Barytes*, as thus obtained by means of the *Gas Blow-pipe*, have before been pointed out; such as the *alloys* formed with it with other metals, which became subject to a slow spontaneous decomposition upon the action of the atmosphere;* &c. &c. But the description given by Dr. Thomson of the *Metal of Barytes* occurs in the last edition of his *Chemistry*: it is therefore much more worthy of the attention of the public, than any thing the author can state as to its chemical character, and may be inserted in his own words:† “Dr. Clarke has decomposed *Barytes*, by exposing it to an intense heat, produced by the combustion of a stream of *oxygen* and *hydrogen gas*, mixed together in the requisite proportion to form water. He has given to the *Metal of Barytes* the name of *Plutonium*.” Dr. Thomson then proceeds to relate its properties, and describes it as “a solid *metal* of the colour of *silver*; melting at a temperature below redness, and not being volatilized by a heat capable of melting plate-glass, but at that temperature acting violently upon the glass; probably decomposing the *alkali* of the glass, and converting it into a *protoxide*. When exposed to the air, it rapidly tarnishes, absorbs oxygen, and is converted into *Barytes*. It sinks rapidly in water, and seems to be at least four or five times heavier than that liquid. It decomposes water with great rapidity; *hydrogen* is emitted; and it is converted into *Barytes*. When strongly pressed, it becomes flat, and hence appears to be both *ductile* and *malleable*.”

LIII. PURE OXIDE OF STRONTIUM. (*Strontian Earth*.)

Here a different process is necessary: the revival of the *metal* is rendered more difficult, owing to the pulverulent state of the earth. The particles must be made to adhere, before fusion can be accomplished; and this *oxide* being much more refractory than the preceding, is almost *infusible per se*, even with the aid of the

* Thomson's “*Annals of Philosophy*,” for November, 1818. pp. 360, 361, &c.

† Thomson's *Chemistry*, vol. I. p. 343. *Lon.* 1817.

black protoxide.* It was then fused, and a *gray metallic bead* was obtained, which acted upon the magnet. Being again dissolved in *nitro-muriatic acid*, and the acid evaporated to dryness, and distilled water added, the solution yielded an intense *blue* precipitate to *Prussiated alkali*: the predominance of *iron* was thereby fully attested. But the process by which the author obtained a *gray metallic bead*, not magnetic, and having all the properties of *Uranium*, was much more simple. For this purpose, he exposed, in a *charcoal crucible*, before the flame of the *Gas Blow-pipe*, a crystal of the *native oxide* of the metal, which is utterly *infusible* before the *Common Blow-pipe*: it was the *green foliated oxide* of *Uranium* from *Cornwall*. Upon the first action of the flame, the *green* colour disappeared. The *oxide* then became *white*. Fusion ensued, attended with a slight but decisive smell of *sulphur*. The substance then exhibited a vehement ebullition, accompanied by a scintillation denoting the combustion of some substance. The revival of the metal immediately followed, in the form of a *reddish-brown* globule. When cut by the file, it had a *metallic gray* colour, and its metallic lustre resembled that of *iron*; but it was not magnetic. It was brittle, and seemed to be one of the hardest of the metals. *PECHLENDE*, *per se*, was then exposed to the same temperature, held in a pair of polished *iron* forceps: it was reduced to a metal resembling *steel*, but so exceedingly hard, that the sharpest file would scarcely touch it. During its fusion and combustion, it deposited, on the *iron* forceps, a *greenish-yellow oxide*, of the colour of the *Canary-bird*.

LIX. SULPHURET OF MOLYBDENUM (*Molybdena*.)

Became instantly fused; sending forth dense white fumes, and covering a pair of *iron* forceps, used to support it, with a *snow-white oxide* of the metal. Among the particles of this *oxide*, when examined with a lens, minute globules of a *silver-white metal* were discernible. The melted mass itself was reduced to a metal, which, when cut by the file, exhibited *metallic lustre*, resembling that of *arsenical iron*.

LX. PEROXIDE OF SCHEELIN. (*Tungstic Acid*.)*

This had been obtained by Professor *Hailstone* in the form of a *yellow* precipitate. It was made into a paste with *olive-oil* and placed within a *charcoal crucible*. Being exposed to the *gaseous flame*, it became fused; and its fusion was attended with a partial combustion and volatilization of its *metallic base*; depositing, first, a deep *blue oxide*, and afterwards a *yellow oxide*, upon the *iron* forceps used to support the *charcoal crucible*. The *metal* then ap-

* *Aikin's Chem. Dict.* p. 465. *Lond.*

† By some considered as an *acid*. (See *Thomson's Chemistry*, vol. I. p. 552. *Lond.* 1817.) The *Tungstic Acid* of *Scheele* is different from this *oxide*. It is a *white powder* of an acid taste, and soluble in water; which has since been proved to be a triple salt. (*Ibid.*)

Its external appearance, after undergoing fusion, resembles fused *Barytes*; and when cut by the file, exhibits an equal degree of *metallic lustre*.

LVI. FERRIFEROUS OXIDE OF CHROMIUM. (*Chromite*.)

Fusible with ease into a dark globule without any *metallic lustre*, but highly magnetic.

LVII. GENICULATED OXIDE OF TITANIUM. (*Titanite*.)

Crystals of this substance, brought by the late Professor *Tennant* from the porcelain manufactory of the *Sevres*, near *Paris*, were presented to the author by *H. Warburton, Esq.* One of those crystals was exposed to the most intense heat of the *gaseous flame*, in a *charcoal crucible*, and *borax* afterwards added: a metal appeared, flowing, in a state of ebullition, upon the *charcoal*. When cooled and taken out, it exhibited a *reddish-coloured mass*, which, examined by a lens, was invested with minute acicular crystals, like hairs, crossing each other, reticularly, in all directions. This appearance was evidently owing to a recombination of the *metallic base* with *oxygen*; the crystals being of the same nature as the prisms of red oxide of *Titanium* seen in *rock-crystal*, and by *French dealers* in minerals called *Cheveux de Venus*. The same substance being again exposed to the temperature of the *gaseous flame*, held in forceps, without *charcoal*, was fused after the manner described in the revival of *Strontium*, and reduced to a pure metal. This metal, with a black surface, upon being cut by a file, exhibited the lustre and colour of polished iron. It should seem, therefore, that the colour of *Titanium* is not red, as it has been described in books of chemistry. It remains, however, to be ascertained, whether the substance thus characterized by *metallic lustre*, and which continues unaltered when exposed to air, be not, after all, in the state of an oxide, from the discovery made in using the *Gas Blow-pipe*, with regard to an oxide of *Tin*, which will presently be more fully mentioned.

LVIII. EXPERIMENTS WITH THE OXIDES OF URANIUM.
(*Pechblende*.—*Uranite*.)

In all the attempts which the author made to obtain a pure oxide of *Uranium* by the analysis of *Pechblende*, it was contaminated with iron, and exhibited, after fusion, before the *Gas Blow-pipe*, a *magnetic bead*. The process used was that recommended by Professor *Jacquin* of *Vienna*. *Pechblende* was dissolved in concentrated *nitric acid*, and evaporated to dryness; distilled water being added and filtered. From the filtered solution, *carbonate of potass* threw down a white precipitate, which became yellow upon the filter. This *peroxide of Uranium* was then mixed with oil, and exposed to the flame of the *Gas Blow pipe*, which converted it into the

LIV. BLACK OXIDE OF COBALT,

Fused, and reduced to the *metallic* state. The *metal* had a *white silvery* appearance, and was partly ductile. A remarkable effect was visible upon the *iron* supporting forceps, which became invested, during the fusion of the *oxide*, with a shining substance resembling *Brunswick-black* varnish.

LXVI. CRYSTALLIZED SULPHURET OF ZINC.
(*Resin Blende.*)

This substance was fused, and reduced to the *metallic* state; the metal becoming visible in the centre of the melted ore: but in the parts more exposed to the action of the *gaseous flame*, the metal had been burned and volatilized; the result of its *combustion* being deposited in the form of a *white oxide*, which covered the *charcoal* used as a support. During its *combustion*, the *gaseous flame* appeared of a *sapphire-blue* colour.

LXVII. NICKEL ALLOYED WITH PALLADIUM.

This beautiful alloy is easily formed before the *Gas Blow-pipe*, by placing the two metals together upon *charcoal*. When alloyed in parts of equal bulk, the alloy is so far malleable, that it admits of being flattened by a common hammer, upon a blacksmith's anvil. After being filed and polished, its surface becomes a perfect mirror, reflecting more light than any other metallic compound. This alloy might afford a useful and highly ornamental substance in the Arts; perhaps surpassing in lustre the most splendid metals known: and it might be advantageously appropriated to the manufacture of telescope-mirrors.

LXVIII. NICKEL ALLOYED WITH IRON.

The two metals were fused together, in equal parts, by bulk. Previously to their union, there was a *vivid combustion*, but it ceased in the instant of their combination. The fusion was afterward more tranquil, with less of ebullition; the result being a globe of *white* and highly splendid alloy.

LXIX. TIN OXIDE. (*Wood Tin.*)

Fusion—deposition of a *white oxide* on the *iron* forceps—violet-coloured flame—scintillation—escape of white fumes—*slag* of a *jet-black colour*, which, when cut by the file, exhibits a high degree of *metallic lustre*, but is not reduced.* In some of these experi-

* See Thomson's Chemistry, vol. III. p. 508. Lond. 1817.

ments with WOOD TIN, white shining vitreous crystals, in quadrangular tables, were observed in the white oxide deposited on the forceps.

LXX. GRANULAR TIN OXIDE OF THE MOLUCCA ISLES.
(*Tin Stone, in grains.*)

This ore was brought to Europe by Professor Thunberg, from whom the author received it at *Upsal*, in Sweden. It is in the form of black grains, which are octahedrons. When placed upon charcoal, they were easily fused and reduced: the fusion, as in the instance of Wood Tin, being attended with a violet-coloured flame; and this appearance immediately preceded the revival of the metal, in a perfectly malleable state.

LXXI. RED IRON OXIDE.
(*Fibrous Red Hematite—Wood Iron.*)

This ore was placed upon charcoal, where it became rapidly fused. Being reduced to a head of metal, it then began to exhibit combustion, and a brilliant scintillation. When cold, and cut by a file, its metallic lustre was conspicuous, and it seemed to be almost malleable. Its more perfect reduction was precluded by its combustion.

LXXII. COMBUSTION OF IRON-WIRE AND OF STEEL,

This affords one of the most brilliant and beautiful experiments with the *Gas Blow-pipe*. Very stout iron-wire is consumed almost in the instant that it is brought into the gaseous flame; and its combustion is attended with such a vivid scintillation, that it displays a very pleasing fire-work. A part of the metal remaining fused at the end of the wire is rendered brittle by the operation. If a steel watch-spring be substituted for the iron-work, the effect is yet more striking; the combustion of the steel literally causing a shower of fire.

LXXIII. ATMOSPHERIC IRON ORE. (*Meteoric Stones.*)

According to the analysis which Klaproth made of the meteoric stone which fell at Stannern, in 1808,* it agrees very remarkably, in its principal constituents, with the Hydrous Silicate of Iron, to which Berzelius gave the name of Hedenbergite,† found at Tunaberg in Sweden.‡ One being considered as an ore of iron, the other may bear the same appellation, although a concretion formed in air, instead of a concretion formed in water. The action of either,

* Klaproth, v. 252. Thomson's Chemistry, vol. III. p. 300. Lond. 1817.

† Afhandlingar, II. 164. Thomson's Chemistry, vol. III. p. 484. Lond. 1817.

METEORIC STONE OF STANNERN.		HEDENBERGITE.	
Iron	23	Black Oxide of Iron	35.25
Silica	48	Silica	40
Lime	9	Lime	3.37
Alumina	14.60	Alumina	0.37

when exposed to the *gaseous flame*, will not be found very materially to differ. A fragment of one of the *meteoric stones*, that fell at *L'Agile* in *Normandy*, weighing eight grains, was placed upon *charcoal*, and submitted to the action of the *Gas Blow-pipe*. The moment the heat began to act, it became fused, and, when cold, exhibited a *black slag*: by continuance of the heat, this *slag* began to boil, and was melted at last into a bead, which, though considerably reduced in size, had sustained no diminution of weight, its density having increased as its bulk diminished. It was then *magnetic*; and, when cut with a file, exhibited *metallic lustre*. The further revival of the *metal* was checked by its *combustion*, as the ore became more and more reduced. An approach, however, towards the revival of *iron*, by the decomposition of an ore from the atmosphere, was irrefragably proved by the result of this experiment.

LXXIV. COPPER WIRE.

Rapid but tranquil fusion, *without combustion*.

LXXV. ALLOY OF COPPER AND TIN. (*Ancient Bronze*.)

Fusion perfectly tranquil, as in the preceding experiment, and *without combustion*.

LXXVI. COPPER ALLOYED WITH ZINC. (*Brass*.)

Fusion, interrupted by flashes, and by a sputtering noise, almost amounting to decrepitation. Flame of a *chrysolite green* colour, differing from that exhibited by the fusion of *pure copper* or of *bronze*. A flocculent *white oxide*, owing to the combustion of the zinc, copiously deposited on the iron supporting forceps. These remarkable phenomena attending the exposure of *brass* to the *gaseous flame*, will be applied to the pursuits of the *Antiquary*, as well as to those of the *Chemist*; because they afford an easy test for distinguishing *ancient bronze* from a spurious imitation in *brass*. Two *bronze* medals, one struck under the *Ptolemies* in *Egypt*, the other a *Roman* medal of *Marcus Aurelius Antoninus*, were submitted to this test. In either instance, the fusion of the *alloy* was tranquil, without *combustion*, and without any deposit being made of a *white oxide* on the forceps. Afterwards, by placing the results in *nitric acid*, the *copper* was dissolved, and *tin* remained, in the form of a *white precipitate*: this precipitate being collected, washed, and dissolved in *muratic acid*, afterwards precipitated *platinum* from its solution in *nitro-muratic acid*. The *specific gravities* of the *alloys* used in these medals were as follow:

<i>Bronze</i> medal of the <i>PTOLEMIES</i>	8,2777
<i>Bronze</i> medal of <i>MARCUS AURELIUS ANTONINUS</i>	8,6129

LXXVII. ORES OF SILVER, AND PURE SILVER.

When pure *silver* wire is exposed to the *Gas Blow-pipe*, it takes fire, and burns with a light *green flame*; the metal coming away, at

the same time, in dense white fumes. This volatilization of silver was noticed by *Vauquelin*, who placed the metal upon charcoal, and urged the volatilization by means of a current of oxygen gas.* A similar result accompanies the fusion of many of the silver ores: the metal being rapidly revived, is almost as instantaneously sublimed.

LXXVIII. SILVER WITH THE METAL OF BARYTES.

The alloy obtained in this experiment was very remarkable, because during two months it preserved its metallic appearance unaltered, and was so readily cut by the file, disclosing always a metallic lustre, that its lustre was attributed to the silver which it was supposed predominated in the alloy. But at the expiration of time now mentioned, the entire mass assumed an earthy form, simply by its exposure to atmospheric air in a warm and dry room. Its particles, ceasing to cohere, and entirely destitute of any metallic lustre, separated from each other, so that nothing remained of the alloy but the pulverulent appearance which had resulted from its disintegration.

LXXIX. COMBUSTION OF PURE GOLD.

As this experiment affords decisive evidence of the combustion of Gold, and, of course, its combination with oxygen, and also exhibits the oxide under a very beautiful appearance, it may be considered as one of the most pleasing experiments with the *Gas Blow-pipe*. That the metal might be exposed in its purest state to the action of the gaseous flame, it was precipitated from a solution of the ore of Tellurium from Nagyag in Transylvania. A small quantity of gold thus obtained was first fused with borax, to make the bead of the pure metal adhere to the end of a tube of a tobacco-pipe made of pipe-clay. In this state, being conveniently fixed for trial before the *Gas Blow-pipe*, it was exposed to the action of the gaseous flame. Owing to the exalted temperature, the light was so intense, that the gold was not discernible in the midst of it; consequently the flame sometimes operated rather on the supporter than on the metal; and it was necessary to check the operation, in order to observe whether the bead had not been driven off. Upon examination, it appeared that the pipe-clay had been fused, the gold being partly buried beneath its surface: the borax, mixing with the fused clay, exhibited a beautiful glass of gold; and part of the tube, where fusion had not taken place, was invested with a shining surface of the metal, as if it had been gilded and burnished. The most striking phenomenon was exhibited around this central appearance. A sort of halo or red circle, of the most lively rose colour, surrounded the whole; the colour being most intense towards the central point where the gold was fixed, and gradually dying away upon the white

* Annales de Chimie, 89. 239. Thomson's Chemistry, vol. I. p. 474. Lond. 1817.

surface of the pipe-clay. By renewing the application of the *gaseous flame*, the bead of *gold*, which, in its first operation, had been considerably diminished in size, was nearly all of it volatilized.

LXXX. ARENACEOUS ORE OF PLATINUM. (*Platina*.)

Fusible into a globule of brittle alloy, with a tarnished and dull aspect.

LXXXI. PURE PLATINUM.

The fusion of this metal, owing to the great improvements here mentioned in the mode of using the *Gas Blow-pipe*, is now become so easy, that this metal melts faster than *lead* in a common fire. It is no longer necessary to make use of wire in exhibiting its *fusion* and *combustion*. The cuttings which are sold by the manufacturers of *Platinum* utensils are placed in a *cupel*, either mounted on a stand or held in a pair of forceps. The mouth of the *jet* is bent downwards,* so as to admit of a perpendicular direction of the *gaseous flame* upon the metal in the *cupel*. The flame is then suffered to act upon the *Platinum*; about a quarter of an ounce of the metal being placed in the *cupel* at first. As soon as this begins to melt, more may be added; until a *cupel* of the common size is nearly full of the boiling metal: and in this manner a mass of *Platinum*, weighing half an ounce, at the least, may be obtained in one brilliant bullet. This, when rolled out, so that, all air-holes being removed, the mass possesses an uniform density, will be found to have a *specific gravity* equal to 20·857. During the fusion of the metal, its *combustion* will be often, if not always, apparent. It will burn with scintillation; and particles of the *black protoxide of Platinum*, if care be used, may be caught upon a sheet of white paper while the *combustion* is going on.

LXXXII. PLATINUM ALLOYED WITH THE METAL OF BARYTES.

A bead of pure *Platinum*, weighing one grain, was placed in a *charcoal* crucible with a bead of equal weight of the *metal of Barytes*. The two metals being brought into fusion by the *gaseous flame*, ran together into an *alloy* of a *bronze* colour, weighing two grains. This alloy preserved its *metallic* appearance during twenty-four hours, when it fell into a reddish powder, resembling the *peroxide of Platinum*.

LXXXIII. PLATINUM WITH SILVER.

This *alloy* is easily formed upon *charcoal*, before the *Gas Blow-pipe*. It is so malleable, when the metals are combined in parts of equal bulk, that a large bead of it may be extended, by means of

* Jets, thus prepared for the *Gas Blow-pipe*, having a bore 1-36 of an inch in diameter, having been made, according to the author's directions, by Mr. Newman, of *Lisle Street, Leicester Square*; together with all other apparatus necessary for the Experiments here described.

a hammer, into a circular plate, without any fracture towards the edge. Its lustre, when polished, is equal to that of pure *silver*; but, owing to its superior hardness, it might be serviceable in the Arts and in coinage.

LXXXIV. PLATINUM WITH GOLD.

This *alloy* has been already described in a former part of this work. It may be formed as in the preceding experiment, upon *charcoal*, with great ease. But if the quantity of the *Gold* do not exceed nine-tenths of the *Platinum*, its colour is tarnished, if not entirely destroyed, by the presence of the latter metal.

LXXXV. PLATINUM WITH COPPER.

The metals were combined in equal parts, by weight. The *alloy* is remarkably fusible, and will continue in a state of vehement ebullition after the stop-cock of the *jet* is closed for the extinction of the *gaseous flame*. This alloy is soft; easily cut by a file; malleable; and of a pale colour, resembling that of pure *gold*. Indeed, it seems as if *gold* might be thus imitated, both with regard to its *specific gravity* and colour.

LXXXVI. PLATINUM WITH IRON, in equal parts, by weight.

This *alloy* is malleable; but so hard, that a file will scarcely cut it. When the two metals are made to combine in a *charcoal* crucible, their joint combustion exhibits a very brilliant fire-work. The surface of the alloy, when polished, exhibits a very high degree of lustre.

LXXXVII. PLATINUM WITH IRON, in equal parts, by bulk.

This *alloy* is brittle. In cooling, air-cavities are left; and the alloy, like *Bismuth* after fusion, exhibits a minute but brilliant crystallization.

LXXXVIII. PURE PALLADIUM.

Easily fusible before the *gaseous flame*, with combustion and scintillation, into a globule with a tarnished appearance, resembling *lead* that has been exposed to the action of the atmosphere.

LXXXIX. PALLADIUM WITH THE METAL OF BARYTES.

When a lamina of *Palladium* is used to support the metal of *Barytes*, and the *gaseous flame* is made to act upon the latter, it spreads over the surface of the *Palladium*, forming an *alloy* with it, which externally resembles a *bronze varnish*. In one of these experiments, small beads were left upon this *alloy*, which, when cut by a file, exhibited a metal resembling *silver*: but their surfaces becoming soon altered by exposure to the air, and covered with an *oxide*, the file was again applied; and again the same reguline metallic lustre was developed.

XC. PALLADIUM WITH COPPER.

The two metals were combined in equal parts, by bulk ; and they united with such rapidity, that it seemed as if they acted upon each other by a powerful mutual attraction. After the alloy was formed, it was remarkably fusible ; and it was always attended with scintillation, arising from the partial combustion of the *Palladium*. This alloy is of a pale colour, and easily cut by the file ; but it is susceptible of a very high polish.

XCI. BRITTLE REGULUS OF RHODIUM.

This substance was presented by Dr. *W. H. Wollaston*. The author expected that he should be able to render it malleable by the action of the *gaseous flame*. He found this, however, to be impracticable, owing to some impurity which no degree of heat would altogether expel. As soon as fusion commenced, the metal came away in white fumes ; but the residue was always brittle. An endeavour was therefore made to purify it, according to the method pointed out by Dr. *Wollaston*. The *regulus* was first melted by a common *blow-pipe* upon charcoal, with four times its weight of lead. It was then dissolved in *nitro-muriatic acid* ; two parts of *muriatic* being added to one part of *nitric acid*. A complete solution of the whole was not effected ; owing to a deficiency in the relative proportion of the two acids. After evaporation to dryness, a salt was obtained, which, being dissolved in *alcohol*, yielded a yellow precipitate to pure *ammonia*. This precipitate, when fused by the *gaseous flame*, became extremely malleable ; but it was found to consist of *Rhodium* still combined with *Lead*. The alloy was therefore once more submitted, upon charcoal, to the action of the *gaseous flame* ; and, by further continuance of the heat, the lead was at length either volatilized or vitrified, and the *Rhodium* rendered perfectly malleable. Professor *Cumming*, who, with other chemical friends, was present at the experiment, himself beat out the *Rhodium*, which had been obtained in the form of a globule, into a thin circular lamina of the pure metal.

XCII. MURIATE OF RHODIUM.

A small portion of this salt, of a red or rosy colour, had been given to the author by the Reverend Archdeacon *Wollaston*, when Professor of Chemistry in the University of Cambridge ; having himself received it from his brother. Its purity, therefore, may be inferred. Being placed in a charcoal crucible, it admitted of easy fusion, attended with occasional combustion. The metal was then revived. At first it appeared, externally, of a jet-black colour, like the metallic slag of *Barytes*. Upon being again exposed to the *gaseous flame*, it began to boil vehemently, and was in part volatilized. There then remained a brilliant globule of metal, resembling the purest *Pla-*

tinum. This metal was malleable. By further continuance of the heat, it was entirely volatilized. The experiment was again repeated; and the metal again obtained, in a malleable state. In this state, after being hammered, it was sent to Dr. Wollaston.

XCIII. GRANULAR ORE OF IRIDIUM.

This experiment was made at the request of Dr. Wollaston. Some very pure grains of the ore of *Iridium*, which he had sent to Professor Cumming, were placed within a charcoal crucible, and brought into contact with the gaseous flame. At their first exposure to heat, they became agglutinated, and partially fused, shining, in the parts where fusion had commenced, with a bright *Platinum* lustre. Afterwards, the agglutinated mass of the *Iridium* was placed within a *plumbago* crucible, and once more exposed to the gaseous flame, when the metal was perfectly melted. It then began to boil, and also to burn with scintillation, depositing a reddish-coloured oxide upon the surface of the *plumbago*. Nothing now remained within the crucible but the vitriform oxide of *Iridium*, in the form of glass,* which was sent to Dr. Wollaston.

XCIV. GRANULAR ORE OF IRIDIUM AND OF OSMIUM.

Some grains of this ore, which had belonged to the late Professor Tennant, being placed in a charcoal crucible, were fused with difficulty into a single globule; a combustion of the *Iridium* taking place the whole time, accompanied by an evident volatilization. The globular residue was afterwards flattened upon an anvil, by severe shocks of a hammer. The metal, however, proved to be so exceedingly hard, that it was only partially extended by this violent pressure. The sharpest *Carron* files could scarcely raise it; constant friction with one of those files, during thirty minutes, being necessary to disclose an even surface of the metal: it then exhibited a degree of metallic lustre, reflecting almost as much light as the alloy of *Nickel* with *Palladium*.

POSTSCRIPT.

To the preceding Experiments may be added two, belonging to a Class of bodies remarkably distinguished from the preceding; namely, the *Combustibles*, commonly so called.

* "Metallic oxides, after fusion, are called glass, because they acquire a good deal of resemblance, in some particulars, to common glass." (*Thomson's Chemistry*, vol. I. p. 475. *Lond.* 1817.) Is not common glass itself a result of the fusion of metallic oxides? Unless, indeed, it can be proved that *Silica* is not a metallic oxide.

XCV. CRYSTALLIZED CARBON. (*Diamond.*)

A fine octahedral *diamond*, of an amber colour, weighing six *carats*, was placed within a *charcoal* crucible, and exposed to the action of the *gaseous flame*. At the first application of the extreme heat, it became limpid and colourless: afterwards, it appeared of a pale *white* colour; it next became opaque, and resembled *ivory*, being now diminished in bulk, and having sustained a loss of weight. After this, one of the solid angles of the octahedron disappeared, and the surface of the *diamond* was covered with bubbles. The other solid angles then vanished; and there remained only a minute spheroidal globule, shining with a considerable degree of *metallic lustre*. Lastly, every atom was volatilized; the whole experiment being completed within three minutes from the time of its commencement.

XCVI. CARBURET OF IRON. (*Plumbago.*)

A very pure fragment of this substance, which had been analyzed by the late Professor Tennant, was exposed, *per se*, to the utmost intensity* of the *gaseous flame*. Its fusion was immediately evident, attended with a vivid scintillation. No change of colour was, however, to be observed in the flame. Upon examining the appearance of the *plumbago*, after its fusion, its surface was found to be covered with innumerable minute globules; some of which exhibited a limpid and highly transparent *glass*; others, a *glass* of a brownish hue; the larger globules being *jet-black* and opaque, with a dark *metallic lustre*; but so exceedingly minute, that their real nature could not be ascertained. When placed in *nefthi*, they sank to the bottom of the liquid, disengaging gaseous bubbles. Water produced no change in their appearance: they fell rapidly to the bottom, and remained there unaltered.

No. VII.

Address read at the First Meeting of the Cambridge Philosophical Society, stating the Design and Objects of its Institution; written at the request of the Council.

AT the opening of the first Meeting of the CAMBRIDGE PHILOSOPHICAL SOCIETY, the Members of the Council avail themselves of

* By gradually turning the *stop-cock* of the *jet* belonging to the *Gas Blow-pipe*, the volume of the *gaseous flame* may be diminished or increased at pleasure; and, of course, the degree of heat may be modified; its utmost intensity being afforded when the *stop-cock* is quite open.

the earliest opportunity that has been offered to them, of expressing to the Society their congratulations upon its Institution. Convinced, as they all of them are, of the advantages likely to result from the establishment of such a Society, they do not hesitate to declare their opinion, that an event of more importance, as affecting the best interests of Science, has rarely occurred in the annals of the University.

A Century has now elapsed, since the celebrated **WOODWARD** prefixed the following axiom, to his "*Essay upon the Natural History of the Earth*," which took the lead in subjects of *Geological* inquiry. "From a long train of experience," said he, "the world is at length convinced, that *observations* are the only sure grounds, whereon to build a lasting and substantial Philosophy. All parties are so far agreed upon this matter, that it seems to be now the common sense of Mankind."* For this reason, when he composed his work, as he himself states, "He gave himself up to be guided wholly by matter of fact; intending to steer that course which is agreed, of all hands, to be the best and surest; and not to offer any thing but what hath due warrant from Observation."† Unfortunately for the fame of this distinguished Naturalist, and for the University to which he bequeathed his valuable Collection, the want of a Society affording the means of Philosophical communication, caused his immense treasure of facts to remain hoarded in a place by no means worthy of the collection, or convenient for its arrangement. Hence the hardly credible truths which are now beginning to come to light respecting the *Woodwardian Collection*; hence, the extraordinary circumstance, first made known by the late Professor, the Rev. *J. Hailstone*, that the *Corundum Stone*, (a substance of such singular utility in the arts, and whose supposed discovery, as distinguished from other Minerals, was attributed to *Dr. Black* of Edinburgh) was not only known to *Woodward*, but specimens of it existed unnoticed in his Cabinet many years before *Dr. Anderson* of Madras sent to Europe the examples upon which *Dr. Black* founded his observations. The same may be said with regard to other bodies; and especially that remarkable substance called the *Native Meteoric Iron of Pallas*; also in the *Woodwardian Collection*.‡ To obviate even the possibility of such occurrences in future; to lay open channels of communication for facts connected with the

* Nat. Hist. of the Earth. p. 1. Lond. 1723.

† Ibid. "The observations I speak of," observes the same Author, p. 3. "were all made in England: the far greatest part whereof I travelled over on purpose to make them; professedly searching all places as I passed along, and taking a careful and exact view of Things on all hands as they presented; in order to inform myself of the present condition of the Earth, and all Bodies contained in it, as far as either Grottoes or other Natural Caverns, or Mines, Quarries, Cole-pits, and the like, let me into it, and displayed to sight the interior parts of it.

‡ To prove this remarkable fact, Professor *Hailstone* purchased a specimen of the *Native Meteoric Iron of Pallas*, and placed it in the *Woodwardian Collection* by the side of *Woodward's Specimen*; that their identity might be the more easily recognised.

advancement of Philosophy, and also to bring together men who are engaged in common pursuits of Science, is the main object of the CAMBRIDGE PHILOSOPHICAL SOCIETY. The zeal and promptness which have been manifested in its Establishment, and a view of the names which have been already added to the list of its Members, excite a reasonable hope that, by means of it, a fund of valuable information may be gradually accumulated. Some idea may be formed of the usefulness of such an Institution, simply by referring to the various periodical Journals, edited, either by individuals, or by societies, in different districts of this kingdom; in which the philosophical contributions of the members of this University, being frittered and squandered away in detached and distant parts, appear to be almost without existence; but if the same scientific productions had been concentrated, their testimony of the industry and abilities of their authors, would not only be creditable to the University, but would also tend more effectually to the advancement of Science. It is one of the objects of the Society, that a Volume for giving publicity to such writings, should occasionally be sent forth; not at any fixed or stated periods, but so often as due and approved materials can be selected for this purpose; and to this end it is proposed, that *Philosophical Communications* should be encouraged from every quarter likely to afford them, by rendering to their authors every possible assistance which may be necessary for their publication. Letters have been already transmitted from the Secretaries to persons who are likely to promote the intentions of the Society; and it is requested that all its Members will themselves further the designs of the Institution, by inquiring for communications relating to the several branches of *Natural History* and *Natural Philosophy*; especially by means of their foreign correspondence, and the observations they may be able to collect from scientific men engaged in foreign travel. Whatsoever may tend to illustrate the History of the *Animal*, the *Vegetable*, or the *Mineral Kingdom*; of organized or of unorganized Existences will be deemed valuable acquisitions. Of course it is hardly necessary to add, that all papers on the subjects of *Zoology*, in all its branches; of *Botany*; *Mineralogy*; *Geology*; *Chemistry*; *Electricity*; *Galvanism*; *Magnetism*; and all *Mathematical Communications* connected with the subjects of *Natural Philosophy*, will be thankfully received, and always duly acknowledged.

The want of a sufficient incitement towards inquiries of this nature, after University Students have commenced Graduates, has been sometimes considered as a defect in the scheme of University education. At that important period of life, when the application of philosophical studies should begin, Academical Students seem to have acted under an impression, that they have brought their studies to a termination. Or, if a disposition should prevail, to approach the studies of Nature, under the conviction that it is better, "*de re ipsa quærere, quam mirari*,"* this tendency, of such incalculable

* Seneca.

value in youthful minds, become checked, either by the retirement or consequent want of intercourse with literary men, to which the calls of professional duties consign them, or by the little honour which in all our Universities has hitherto awaited the inquiry. The valedictory observations of *Bishop Watson* afford a decisive confirmation of this truth:* and the reproaches cast upon our country by the celebrated *Kirwan*† may be still considered as not altogether inapplicable. "In *Sweden* and *Germany*," says he, "*Mineralogy* is considered as a Science worthy the attention of Government. There are Colleges in which it is regularly taught; it forms a distinct and honourable Profession; like that of the Soldier, the Merchant, or the Barrister; its superior officers form a part of the administration of the state. Young Students fraught with the knowledge to be acquired in their own Country, are sent abroad to glean all that can be collected from a more diversified view of Nature. This example has been followed by France, Russia, and Spain. *Chemistry* too, the Parent of *Mineralogy*, is cultivated by the most enlightened nations in Europe, and particularly in France, with a degree of ardour that approaches to enthusiasm. In England, on the contrary, it receives no encouragement from the public." These observations which that eminent Naturalist then applied to the studies in which he was more particularly engaged, may to a certain extent be yet directed towards every other branch of *Natural Philosophy*. In the posthumous works of Dr. *Hooke*, which were dedicated to Sir *Isaac Newton*, when he was President of the Royal Society, by its Secretary *Waller*,‡ we find their author maintaining, that the neglect shown to *Natural Philosophy* has been characteristic, not of this country alone, but of all nations and in all ages. "Learned Men," he complains, "take only a transient view of *Natural Philosophy*, in their passage to other things; thinking it sufficient to be able to talk of it in the phrase of the school. Nor is it only so now, but it has been so almost in all ages; so that for about two thousand years, of which we have some account in History, there is not above one quarter of that space in which men have been philosophically given; and among such, as have been so, several of them have been so far disjoined by Time, Language, and Climate, by manner of Education, manners, and opinions, and divers other prejudices, that it could not be expected it should make any considerable progress."

Yet the effect of such studies upon the mind, and especially in places appropriated to public education, and in an age when false philosophy and irreligion have been so alarmingly manifested, may perhaps secure them a more favourable reception; since it requires no argument to prove that the evidences of Religion always keep

* *Watson's "Miscellaneous Tracts,"* vol. II. p. 438. Lond. 1815.

† *Min. Prof.* p. 1. Lond. 1784.

‡ *Hooke's Present State of Natural Philosophy;* see *Posthumous Works*, p. 6. Lond. 1705.

pace, and are progressive, with the discoveries in Natural knowledge. After a long life entirely devoted to the studies of *Natural History*, LINNÆUS placed over the lintel of the door of his Museum an inscription which was calculated to convey to the mind of every approaching Student a conviction of this truth: INNOCUÈ VIVITO! NUMEN ADEST!*

Having thus set before the Society the main design and objects of its Institution, the Council beg to call the attention of this meeting to considerations of a subordinate nature. It will be necessary to provide some place in which the future Meetings may be held, and where a repository may be formed for the preservation not only of the archives and records of the Society, but also of such documents, books, and specimens of *Natural History*, as may hereafter be presented or purchased. The utmost economy will at present be requisite in the management of the Society's funds; and therefore if the consent of the University could be obtained, it would be highly desirable that the expenses of printing the Society's Transactions, should be defrayed by the University.† His Royal Highness the Chancellor has accepted of the Office of Patron, and his Letter, containing the expression of his approbation, will be read by one of the Secretaries. The present Vice-Chancellor; our High Steward; both our Representatives in Parliament; and many other distinguished Members of the University, who are not resident, have also contributed toward the undertaking; and there is therefore every reason to hope, that the Graduates of this University, who associated for the Institution of the CAMBRIDGE PHILOSOPHICAL SOCIETY, by their assiduity and diligence in its support, and by their conspicuous zeal for the honour and well-being of the University; will prove to other times, that their *Lives*, and their *Studies*, have not been in vain.

No. IX.

List of Dr. Clarke's Papers, in Thomson's Annals of Philosophy.

Besides these there are several Papers, whose Titles have been already inserted, and one upon the Blow-pipe, in the Journal of the Royal Institution.

Two Letters to Dr. Thomson, announcing the fusion of refractory substances, and the partial reduction of the earths; the former

* See Linnæus's Diary, written by himself, in Pulteney's Linnæus by Mates, p. 563. Lond. 1805.

† This is now done.

dated Cambridge, Aug. 23, 1818; the latter, Sept. 9.—*Annals*, Vol. viii. p. 313.

Some observations respecting the new metals obtained from Barytes and Strontian; also, of a pure metal observed in the decomposition of Borax, together with other remarks on the means of analysis, afforded by burning a highly compressed mixture of the gaseous constituents of water. In a letter to the Editor.

N.B. At the end of this letter is an account of the first explosion.

Annals, Vol. viii. p. 357.

Farther observations respecting the decomposition of the earths, and other experiments made by burning a highly compressed mixture of the gaseous constituents of water.—*Annals*, Vol. ix. p. 89; Jan. 1817.

Improvement in the Oxygen and Hydrogen Blow-pipe. Letter to Dr. Thomson, Feb. 1817.—*Annals*, Vol. ix.

A continuance of the observations made by burning a highly compressed mixture of the gaseous constituents of water.—*Annals*, Vol. ix. p. 194; March, 1817.

Farther improvement in Broke's Blow-pipe, in a letter to Dr. Thomson.—*Annals*, Vol. ix. p. 326; April, 1817.

Account of some experiments made with the Gas Blow-pipe; being a continuation of former observations upon the same subject.—*Annals*, Vol. x. p. 133; Aug. 1817.

Account of an improvement made in the Gas Blow-pipe; with some additional remarks upon the revival of metals from their oxides, and of the fusion of refractory bodies, by means of the same instrument.—*Annals*, Vol. x. p. 373; Nov. 1817.

Account of some remarkable minerals recently brought to this country from the island of Jean Mayen, in the Greenland Seas, North Lat. 71°; also, a description and analysis of a substance called Petalite, from Sweden.—*Annals*, Vol. xi. p. 194; March, 1818.

Account of a meteor, apparently accompanied by matter falling from the atmosphere, as seen at Cambridge by Professor E. D. Clarke, of that University, and other persons who were eyewitnesses of the phenomenon.—*Annals*, Vol. xi. p. 273; April, 1818.

On the Aphlogistic Lamp.—*Annals*, Vol. xi. p. 304; April, 1818.

Farther account of Petalite, together with the analysis of another new Swedish mineral, found at Gryphytta, in the province of Westmania, in Sweden.—*Annals*, Vol. xi. p. 365; May, 1818.

Analysis of a specimen of the Diamond Rock.—*Annals*, Vol. xi. p. 464; June, 1818.

On the colouring constituent of Roses.—*Annals*, Vol. xii. p. 126; August, 1818.

On the colouring constituent of Roses, and of the flowers and leaves of other vegetable bodies.—*Annals*, Vol. xii. p. 296; Oct. 1818.

Notice respecting the discovery of Pearl Sinter.—*Annals*, Vol. xii. p. 464; Dec. 1818.

Account of a newly discovered variety of green Fluor Spar, of very uncommon beauty, and with remarkable properties of colour and phosphorescence.—*Annals*, Vol. xiv. p. 34; July, 1819.

Method of obtaining Nickel in a state of perfect purity and malleability.—*Annals*, Vol. xiv. p. 142; Aug. 1819.

On the alloy of Platinum and Lead (accidental error for Tin).—*Annals*, Vol. xiv. p. 229; Sept. 1819.

On the alloy of Platinum and Tin.—*Annals*, Vol. xiv. p. 470; Dec. 1819.

Observations on Gehlenite, made during a series of analytical experiments upon this mineral, which prove that it contains Potass.—*Annals*, Vol. xiv. p. 449; Dec. 1819.

Observations upon the ores which contain Cadmium, and upon the discovery of this metal in the Derbyshire Silicates and other ores of Zinc.—*Annals*, Vol. xv. p. 272; April, 1820.

Regular crystallization of Olive Oil.—*Annals*, Vol. xv. p. 329; May, 1820.

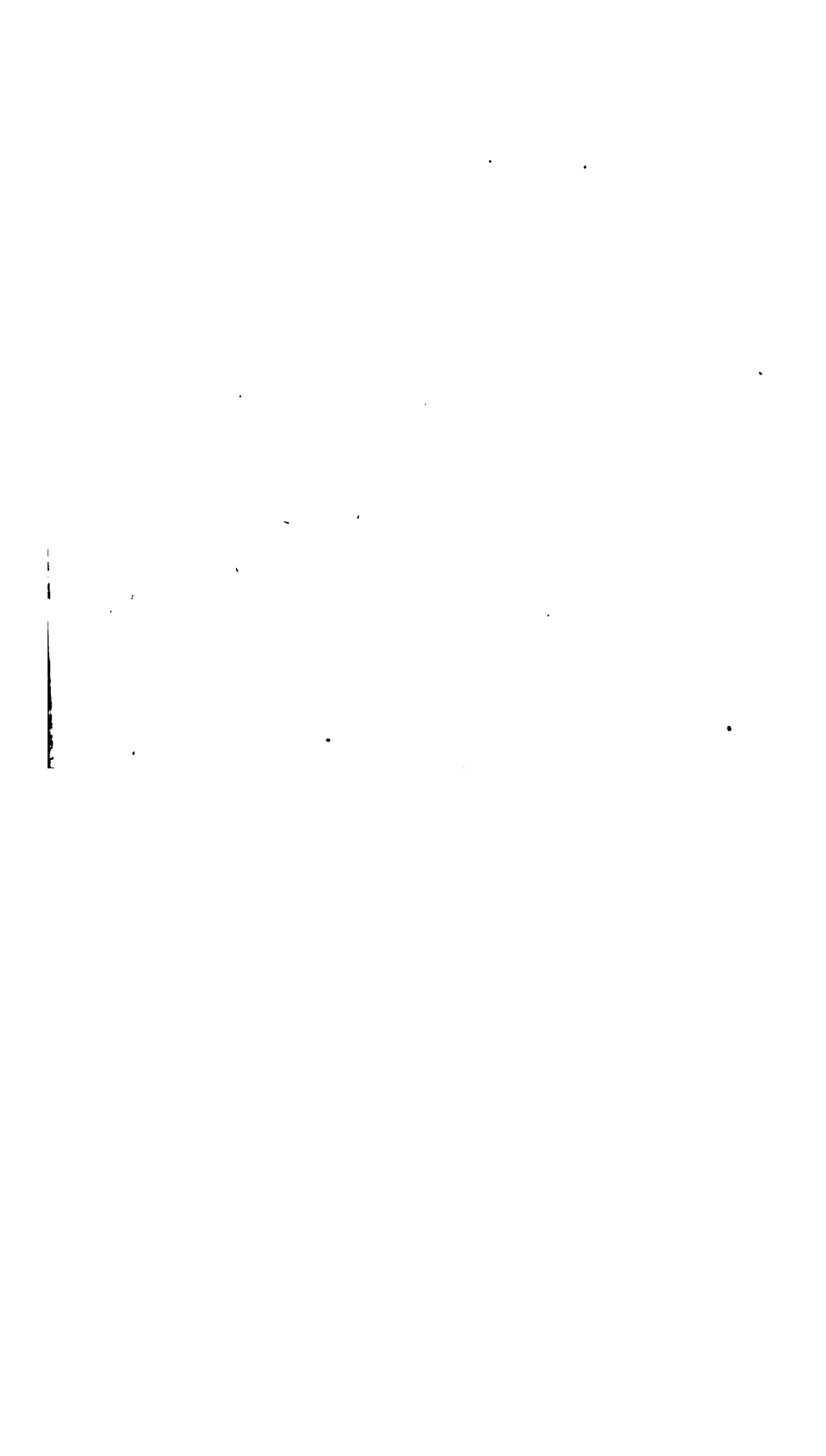
On the chemical examination, characters, and natural history of Arragonite, explaining also the causes of the different specific gravity of its different sub-varieties.—*Annals*, New Series, ii. 57; July, 1821.

On crystallized Magnesian Carbonate of Lime, from Alston Moor in Cumberland; crystallized Plumbago, and some other minerals from the mines of Cumberland.—*Annals*, New Series, ii. 415; Dec. 1821.

On Cadmium and the habitudes of some of its ores, showing the means of detecting the presence of the metal in English ores of Zinc.—*Annals*, New Series, iii. p. 123; Feb. 1822.

On the presence and proportion of Cadmium in the metallic sheet Zinc of Commerce (last paper he ever wrote).—*Annals*, New Series, iii. p. 195; March, 1822.









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